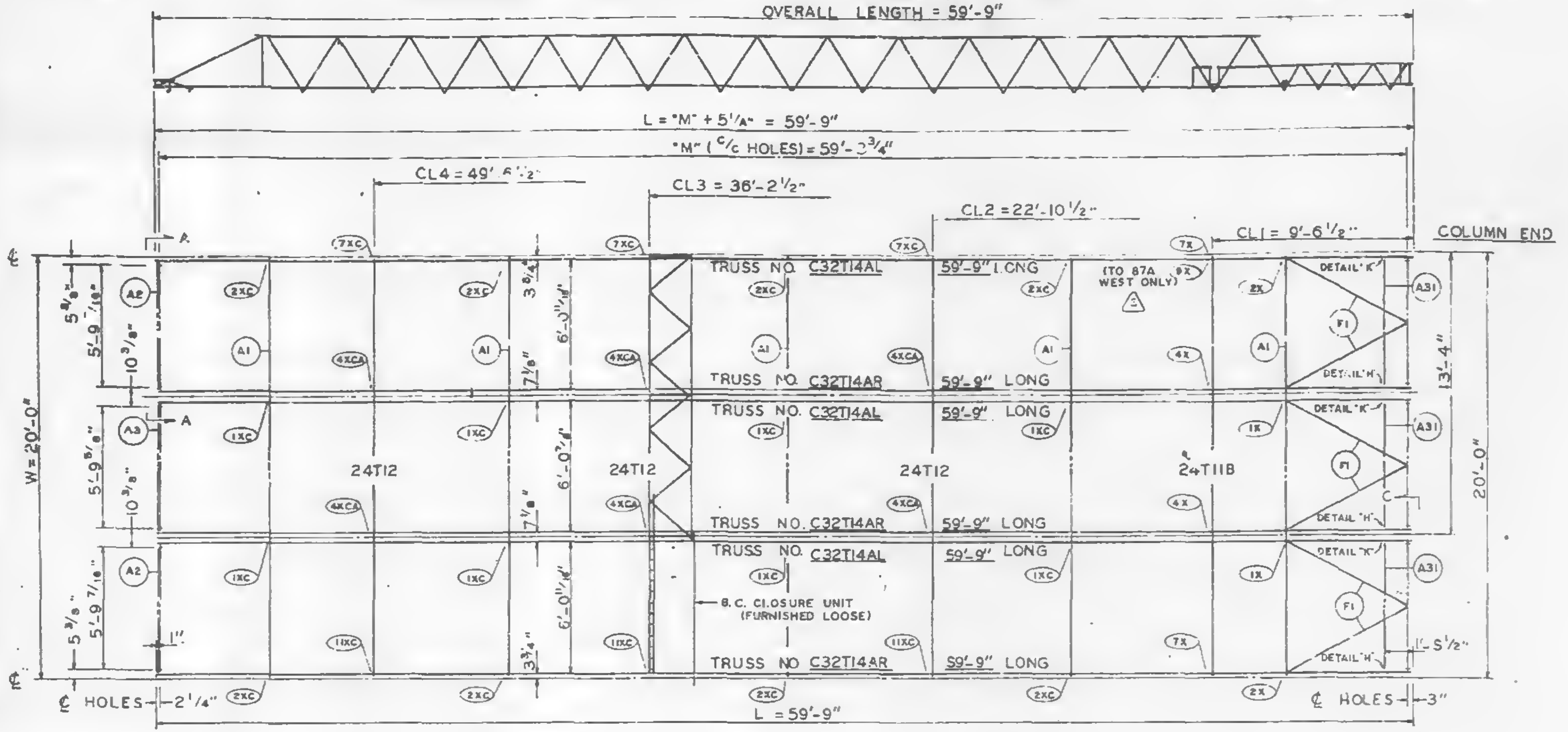
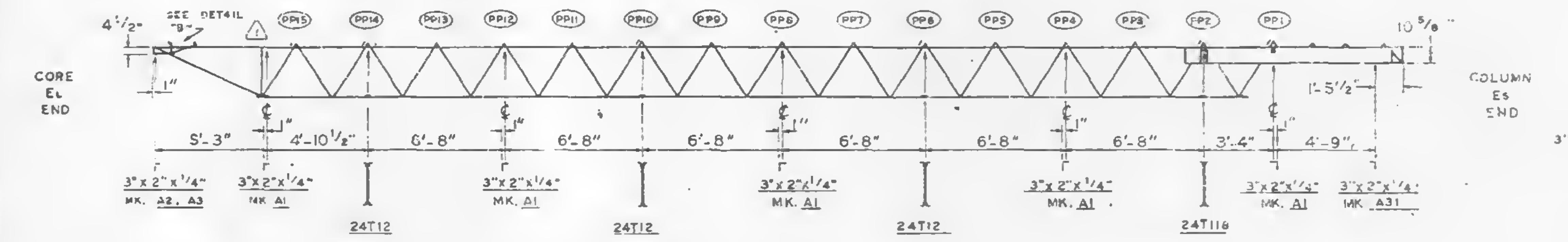
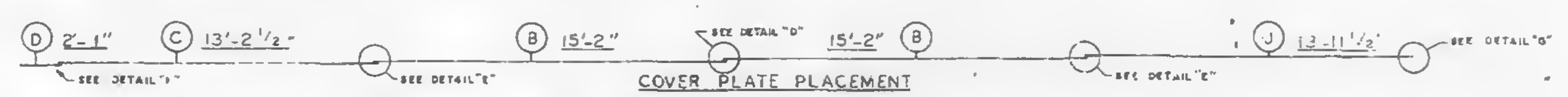
200-271
WTC1-131-LECA

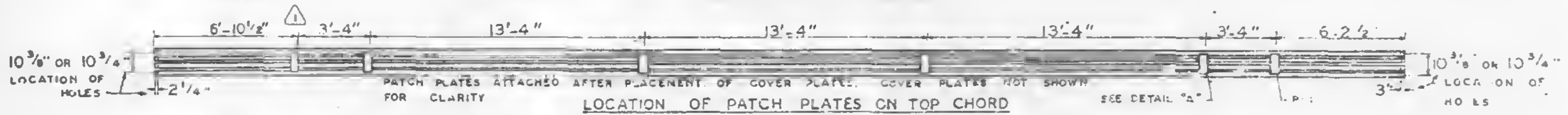


PANEL NO. C2A SIZE 20' x 59'-9"

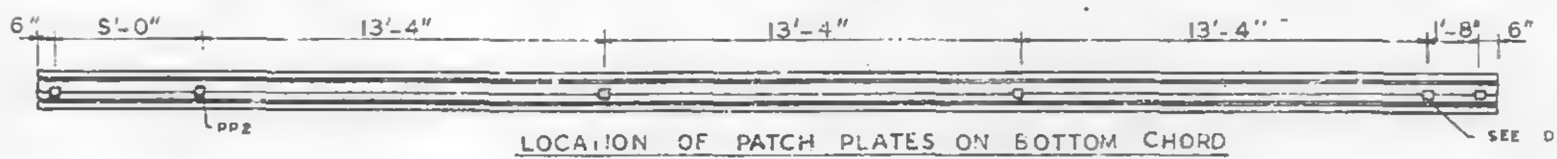




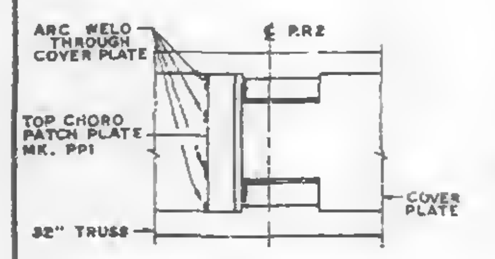
COVER PLATE PLACEMENT


6'-10 1/2" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"
10 3/8" OR 10 3/4" LOCATION OF HOLES
2 1/4"
3"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
SEE DETAIL "A"

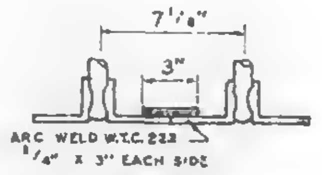
LOCATION OF PATCH PLATES ON TOP CHORD



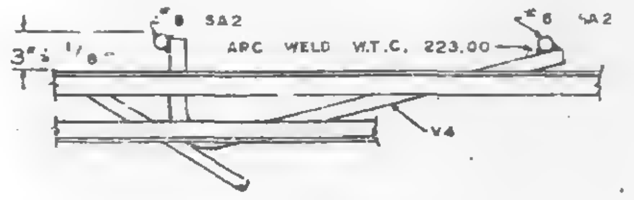
LOCATION OF PATCH PLATES ON BOTTOM CHORD



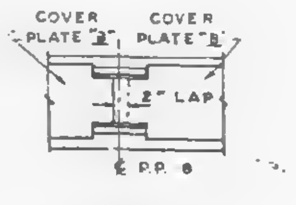
TOP VIEW - DETAIL "A"



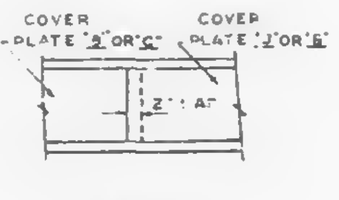
DETAIL "C"



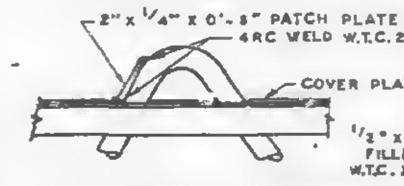
DETAIL "B"



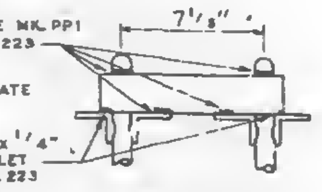
DETAIL "D"



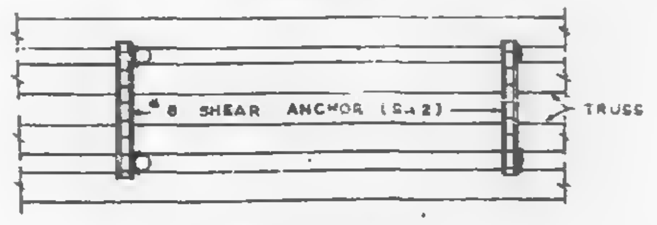
DETAIL "E"



DETAIL "A"

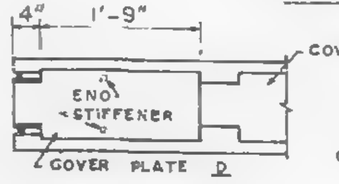


SECTION B-B

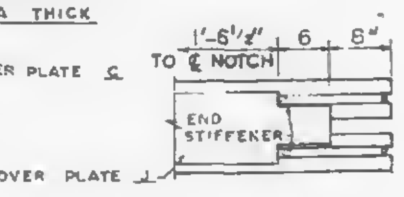


TOP VIEW DETAIL "B"

COVER PLATES
29 GA THICK

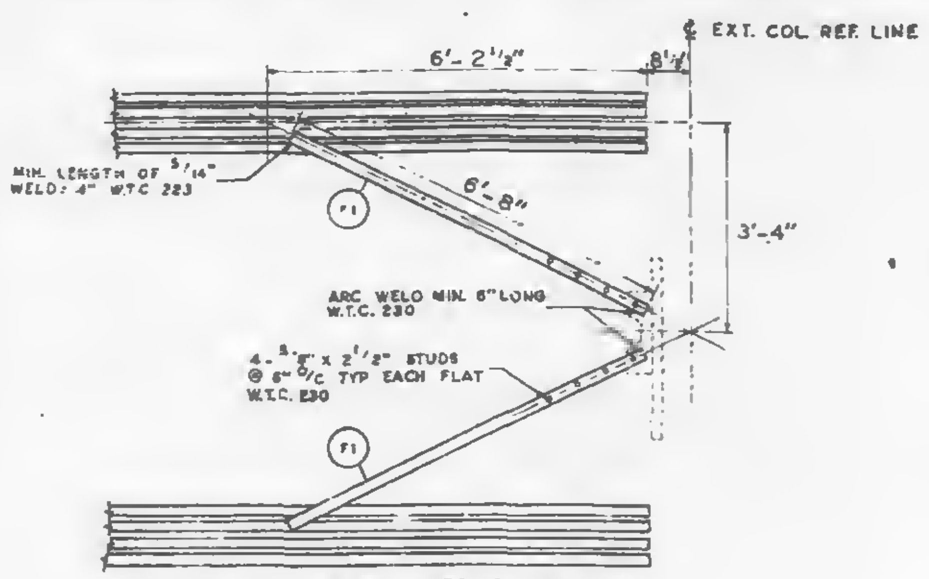


DETAIL "F"

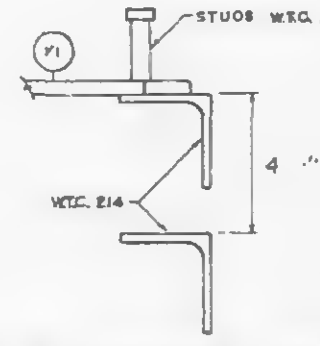


DETAIL "G"

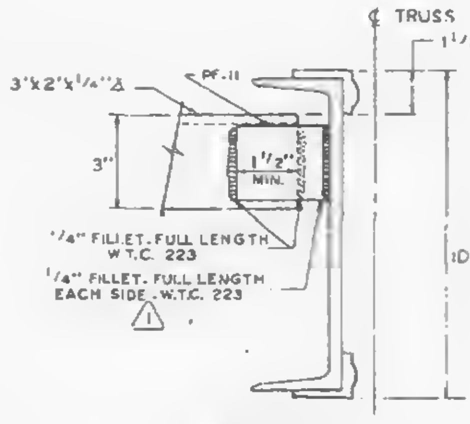
FIELD PUNCH
COVER PLATES OVER
END STIFFENERS W.T.C. 223.00


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
F1
6'-8"
3'-4"
ARC WELD MIN. 6" LONG W.T.C. 230
4-5/8" x 2 1/2" STUDS @ 6" C/C TYP EACH FLAT W.T.C. 230
F1

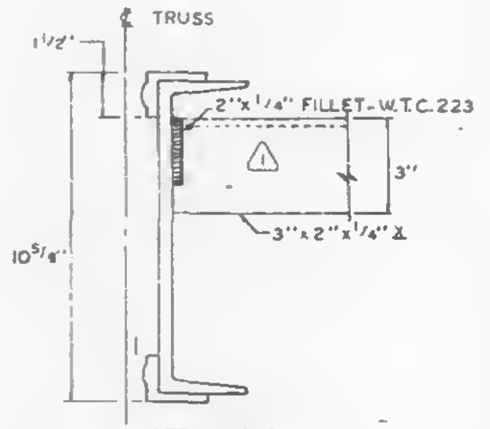
TYPICAL PLAN OF TOP CHORD COLUMN END
DIAGONAL TRUSS BRACES PLACED OVER DECK
BY W.T.C. 223.



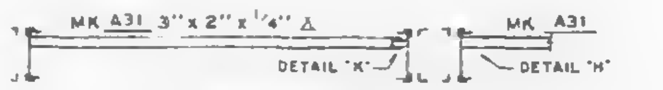
CLIP ANGLE LOCATION FOR DIAGONAL
FLATS 4 1/2" ABOVE COLUMN CLIPS FOR
TRUSS BEARING.


℄ TRUSS
1 1/2"
3"x2"x1/4" ∠
PF-11
3"
1 1/2" MIN.
1/4" FILLET. FULL LENGTH W.T.C. 223
1/4" FILLET. FULL LENGTH EACH SIDE W.T.C. 223
10 5/8"

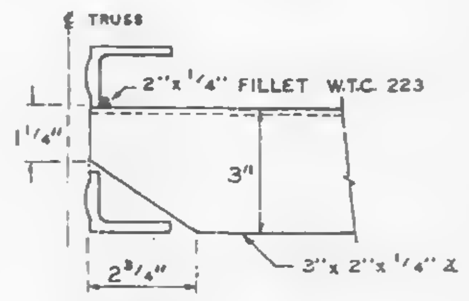
DETAIL "K"
END SUPPORT ANGLE
ATTACHMENT



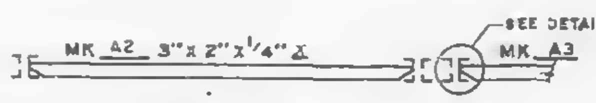
DETAIL "H"
END SUPPORT ANGLE
ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



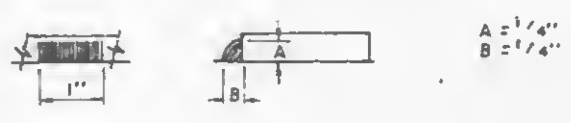
DETAIL "J"
END SUPPORT ANGLE
ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T14AL | 3 | C32T14AL x 59'-9" | ST 214AL |
| | T14AR | 3 | C32T14AR x 59'-9" | ST 214AL |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T11B | 1 | 24T11B x 19'-11" | BT 211B |
| | T12 | 3 | 24T12 x 19'-11" | BT 212 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 1 1/4" O 6'-6 1/2" TUBE | BT 212 |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x 2"x 1/4"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x 2"x 1/4"x 5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x 1/4"x 5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x 2"x 1/4"x 5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3"x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 21 | 2"x 1 1/2"x .25"x 0'-6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ϕ x 1'-3" | ST 400 |
| | | | | |
| | | | | |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 0'-8 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |
| | | | | |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| 3 | 6-16-69 | AS NOTED | G.O.C. |
| 2 | 5-12-69 | AS NOTED | G.O.C. |
| 1 | 2-4-69 | AS NOTED | G.O.C. |

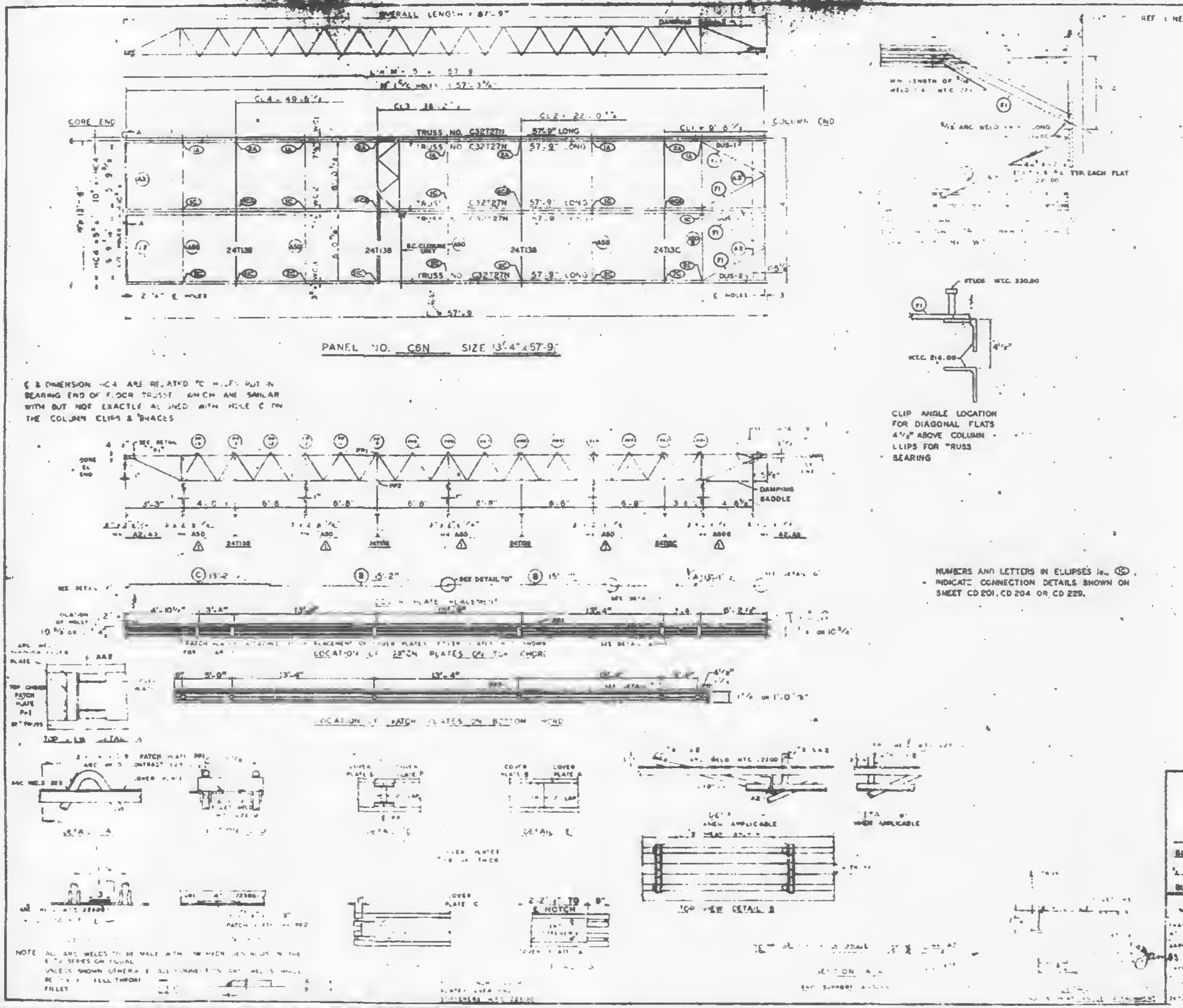
| REF. DRWG. | | |
|---|---|---|
| | 7-A93-28 | 10-4-68 |
| | 7-A84-28 | 7-22-68 |
| | 7-A81-13 | 10-4-68 |
| | 7-A82-7 | 7-22-68 |
| | 7-A82-15 | 10-4-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH) 1
PANEL C2A - 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A93-28 | PLATE |
| APPROVED FOR FABRICATION James White FOR P.O.N.Y.A | DATE 6/20/69 | DRAWN BY LWK<br>DATE DEC. 5, 1968 | |
| APPROVED FOR FABRICATION BY LACLEDE STEEL CO. FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA<br>DATE DEC. 5, 1968 | IN CHARGE OF PROD. DEV |
| DETAILED BY A.C. WEBER | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP C2A |



PANEL NO. C6N SIZE 13'-4" x 57'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES ie. ⓒ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 229.

NOTE: ALL ARC WELDS TO BE MADE WITH [illegible] SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION [illegible] WELDS SHALL BE [illegible] FULL THROAT FILLET

REQUIRED MAT[illegible]

| MATERIAL | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| FLOOR TRUSSES | [illegible] | 4 | C32T27N x 57'-[illegible] | [illegible] |
| BRIDGING TRUSSES | T13B | 3 | 24T13B – 14'-1½" | ST [illegible] |
| | T13C | 1 | 24T13C – 14'-1½" | ST 8180 |
| 3½"x2"x¼" ANGLE | A2 | 2 | 3"x2"x¼" x 5'-11 1/16" | ST 403 |
| | A3 | 2 | 3"x2"x¼" x 5'-11 5/8" | ST 403 |
| | A50 | 2 | 3"x2"x¼"x14'-1½" | ST 410 |
| DIAGONAL FLATS | F1 | 4 | 1"x¼" x 6'-8" | ST 403 |
| [illegible] PLATES | PP1 | 18 | 2"x¼" x 0'-9" | ST 400 |
| | [illegible] | 18 | [illegible] x 0'-9" | ST 830 |
| COVER PLATES | | | [illegible] | ST 203 |
| | | | 35 x 15⅛ | [illegible] |
| | C | 3 | 9" x .035" x 13'-2" | ST 103 |
| [illegible] CLIPS | [illegible] | 13 | 2"x1½"x3/16" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-3" | ST 400 |
| DAMPING SADDLE | DUS 1 | 2 | [illegible] | ST200 |
| | DUS 2 | 1 | [illegible] | ST200 |
| CONNECTION BAR | CB1 | 4 | 1" ø x 1'-3" | ST 400 |
| CONNECTION PLATES | P1 | 6 | 3/16" x [illegible] | ST 400 |
| | P2 | 4 | 4½" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | PP6 | 4 | 3"x1" x 0'-11" | ST 413 |
| CLOSURE UNIT | BC | 3 | 1¼" D 6'-6" TUBE | ST [illegible] |

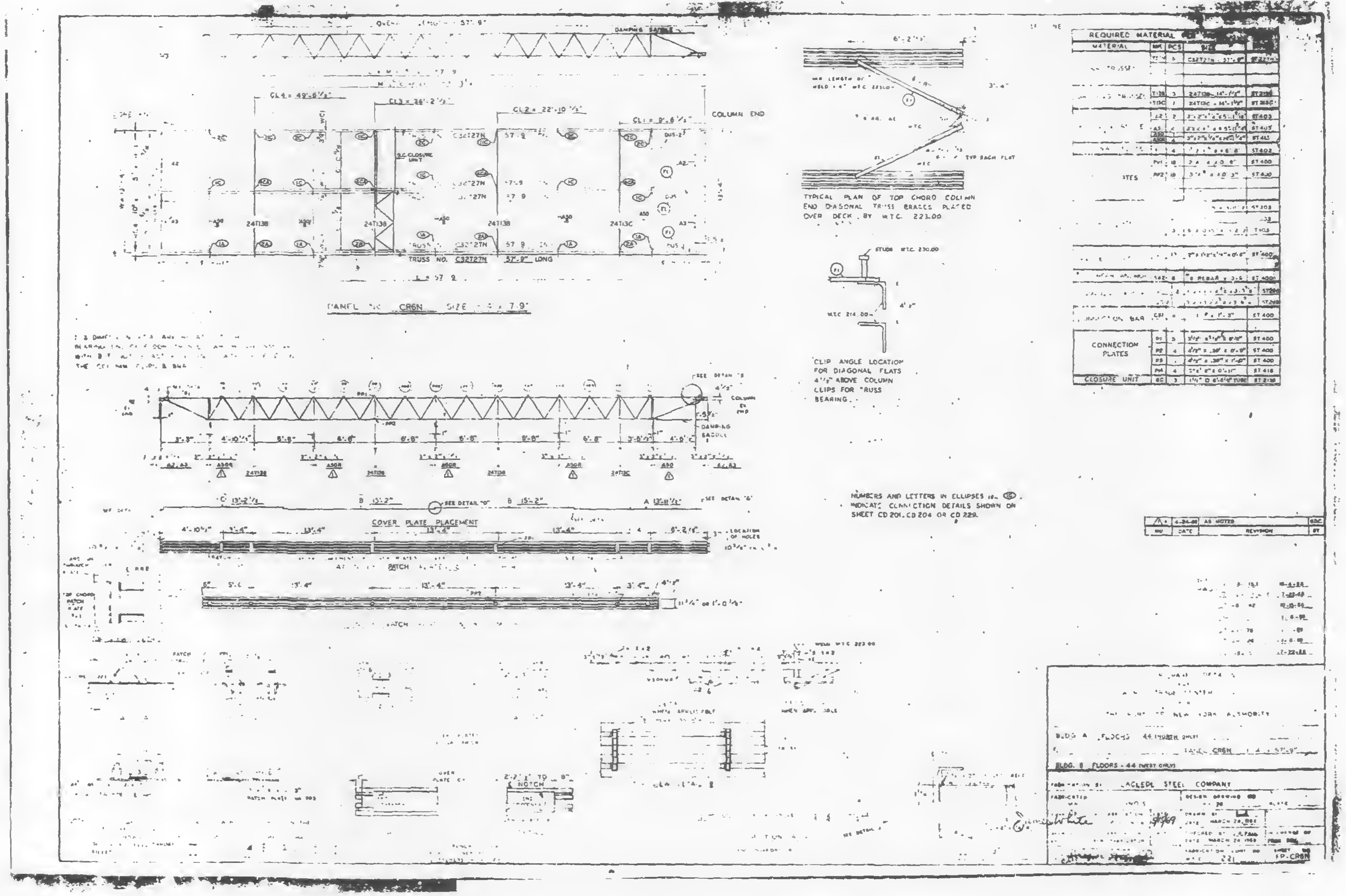
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 4-24-69 | AS NOTED | GDC |

REF DRWG
1 A34 [illegible] 10-4-68
2 A34 15 & 16 7-22-68
[illegible] A34 42 10-6-68
SA -24 1-8-69
[illegible] A34-22 [illegible]
[illegible] 49-26 1-8-69
[illegible] 48/-E 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (NORTH BENT)
PANEL C6N 13'-4" x 57'-9"
BLDG. B FLOORS 44 (WEST BENT)

FABRICATION BY [illegible] STEEL COMPANY
[illegible] MACK [illegible] ILLINOIS
APPROVED FOR FABRICATION FOR [illegible] James [illegible] DATE 5/13/69
DRAWN BY [illegible] DATE MARCH 20, 1969
CHECKED BY [illegible] DATE MARCH 24, 1969
IN CHARGE OF [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-C[illegible]



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK, BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NUMBERS AND LETTERS IN ELLIPSES ie. Ⓒ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 229.

| REQUIRED MATERIAL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| [illegible] TRUSSES | T2 | 5 | C32T27N - 57'-9" | ST227N |
| [illegible] TRUSSES | T13B | 3 | 24T13B - 14'-1 1/2" | ST213B |
| | T13C | 1 | 24T13C - 14'-1 1/2" | ST213C |
| | A2 | 2 | [illegible] | ST403 |
| | A3 | 4 | [illegible] | ST403 |
| | A50R | 4 | [illegible] | ST415 |
| | [illegible] | 4 | [illegible] | ST402 |
| [illegible]ATES | PP1 | 18 | [illegible] | ST400 |
| | PP2 | 18 | [illegible] | ST410 |
| | | | [illegible] | ST403 |
| | | | [illegible] | [illegible] |
| | | | [illegible] | ST403 |
| | | | [illegible] | ST400 |
| [illegible] | SBZ | 8 | # 8 REBAR x [illegible] | ST400 |
| | | 2 | [illegible] | ST200 |
| | | | [illegible] | ST200 |
| [illegible] BAR | CB1 | | [illegible] | ST400 |
| CONNECTION PLATES | P1 | 3 | [illegible] | ST400 |
| | P2 | 4 | [illegible] x .38" x 0'-9" | ST400 |
| | P3 | | [illegible] x .38" x 1'-0" | ST400 |
| | P4 | 4 | [illegible] | ST418 |
| CLOSURE UNIT | SC | 3 | 1 1/2" O [illegible] TUBE | ST213B |

| | | | |
|---|---|---|---|
| 1 | 4-24-69 | AS NOTED | GDC |
| NO | DATE | REVISION | BY |

10-4-68
7-22-68
10-15-68

THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (NORTH ONLY)

PANEL CR6N 57'-9"

BLDG. B FLOORS - 44 (WEST ONLY)

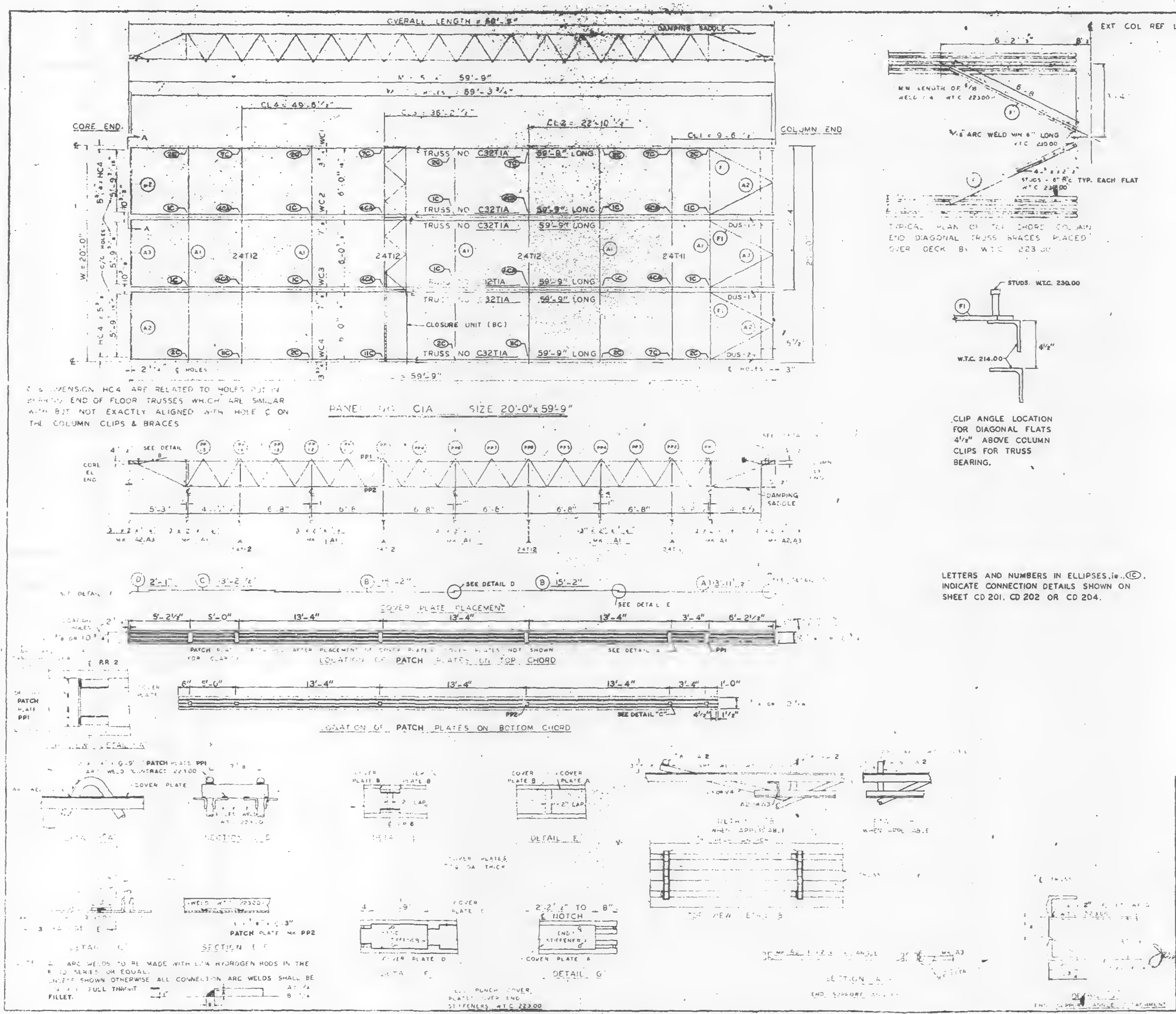
FABRICATION BY LACLEDE STEEL COMPANY

DRAWN BY
DATE MARCH 24, 1968

CHECKED BY
DATE MARCH 24 1969

221

FP-CR6N



C & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. C1A SIZE 20'-0"x 59'-9"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T1A | 6 | C32T1A - 59'-9 | ST201A |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| 3"x2"x1/4 ANGLE | A1 | 5 | 3"x2"x1/4 x 19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x 5'-11 1/8 | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x 3/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8" x 0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9"x .0135" x 13'-11 1/2" | ST303 |
| | B | 6 | 9"x .0135" x 15'-2 | ST303 |
| | C | 3 | 9"x .0135"x 13'-2 1/2 | ST303 |
| | D | 3 | 9"x .0135"x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 21 | 2"x 1 1/2"x 1/4"x 0'-6 | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2 x 3/8"x 3'-8 7/8" | ST298 |
| | DUS 2 | 1 | 3 1/2"x 3 1/2 x 3/8 x 3'-8 7/8" | ST298 |
| CONNECTION BAR | CB1 | 4 | 1 5/8 x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2 ∠s 1 1/2"x 1 1/4"x | BT212 |
| | | | .230 x 8'-6 1/2" | CD 204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

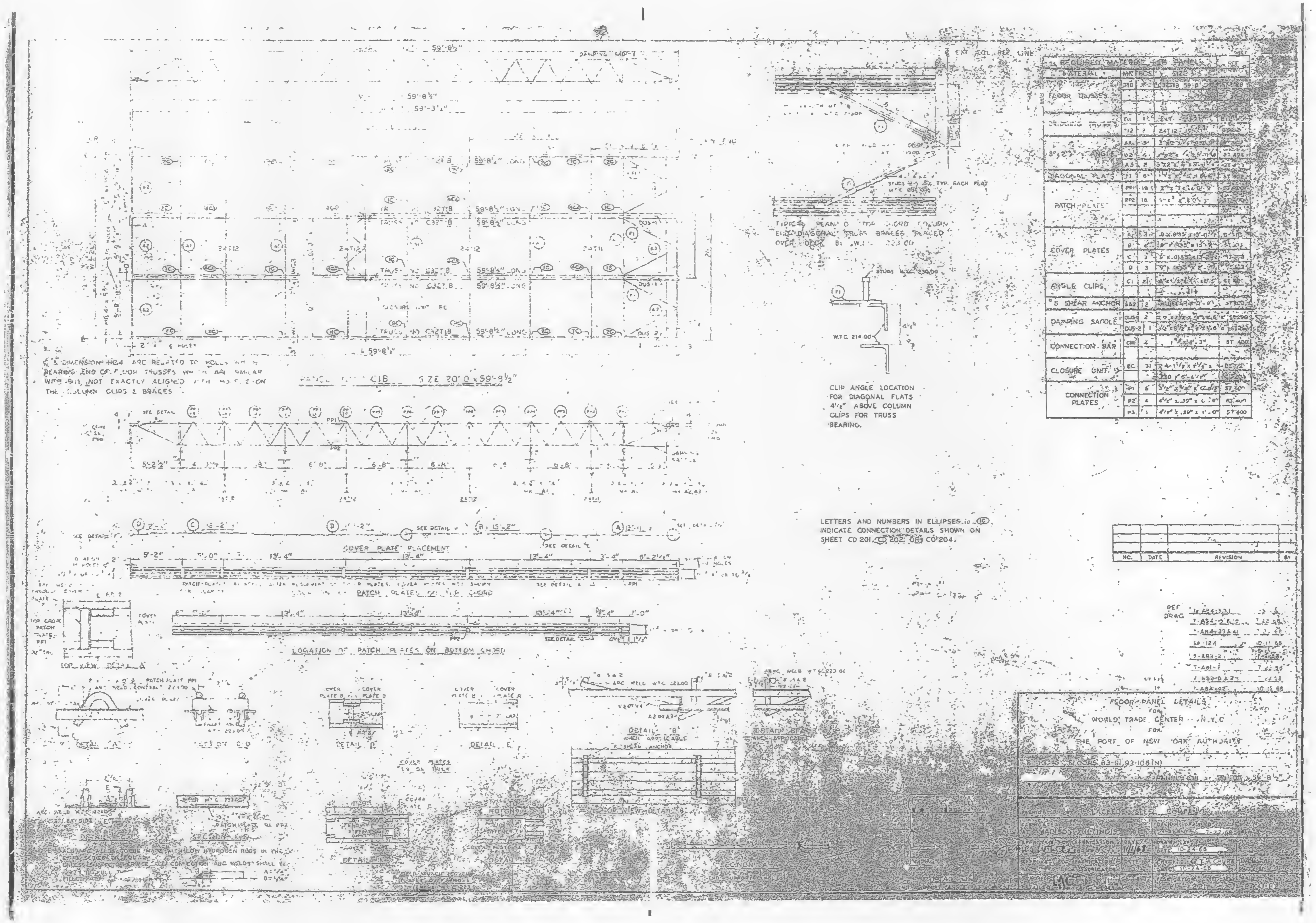
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| ⚠1 | 7-17-68 | GENERAL | T.M.C. |

REF. DWGS.
A84 13.1 & 39
A84 2 & 16 5-6-68
A84 41 3-68
SA 2-3 2-26-68
A84 1 2-15-68
A84 2 2-15-68
A84 5 & 7 2-15-68
A84-42 4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A 49.58, 60.55, 13,
59 NORTH PANEL C1A 20'-0" x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. A84 7 4-1-68
APPROVED FOR FABRICATION FOR PONYA DATE 8/16/68
DRAWN BY DATE APRIL 10, 1968
APPROVED FOR FABRICATION DATE
CHECKED BY J.R PAUL DATE APRIL 10, 1968
IN CHARGE OF PROD DEV
LACLEDE STEEL CO.
DETAILED BY A. C. WEBER
FABRICATION CONT NO. WTC 221
SHEET NO. FP C1A



℄ & DIMENSIONS HC4 ARE RELATED TO HOLES AT BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES ON THE COLUMN CLIPS & BRACES

PANEL UNIT C1B SIZE 20'0" x 59'-8½"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

| REQUIRED MATERIAL FOR PANELS | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | 21B | 3 | C32TIB 59'-8" | [illegible] |
| BRIDGING TRUSSES | T11 | 1 | 24T [illegible] | [illegible] |
| | T12 | 2 | 24T12 [illegible] | [illegible] |
| 3" x 2½" ANGLE | A1 | 3 | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | 2 | [illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] | ST 400 |
| COVER PLATES | A | 3 | [illegible] | [illegible] |
| | B | 6 | [illegible] | ST 203 |
| | C | 3 | [illegible] | [illegible] |
| | D | 3 | [illegible] | [illegible] |
| ANGLE CLIPS | C1 | 21 | [illegible] | ST 400 |
| ⅝ SHEAR ANCHOR | SA2 | 12 | [illegible] | ST 300 |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | ST 290 |
| | DUS-2 | 1 | [illegible] | ST 290 |
| CONNECTION BAR | CB | 4 | [illegible] | ST 400 |
| CLOSURE UNIT | BC | 31 | [illegible] | [illegible] |
| CONNECTION PLATES | P1 | 5 | [illegible] | ST 400 |
| | P2 | 4 | 4½" x .30" x [illegible] | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|

| REF. DRWG. | |
|---|---|
| 7-AB4-33 & 41 | 7-2-68 |
| SA-124 | 10-11-68 |
| 7-AB3-2 | [illegible] |
| 7-AB1-2 | 7-22-68 |
| 7-AB2-6 & 7 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. "A" FLOORS 83-91, 93-106 (N)

PANEL C1B 20'-0" x 59'-8½"

FABRICATED BY LACLEDE STEEL COMPANY

MADISON, ILLINOIS

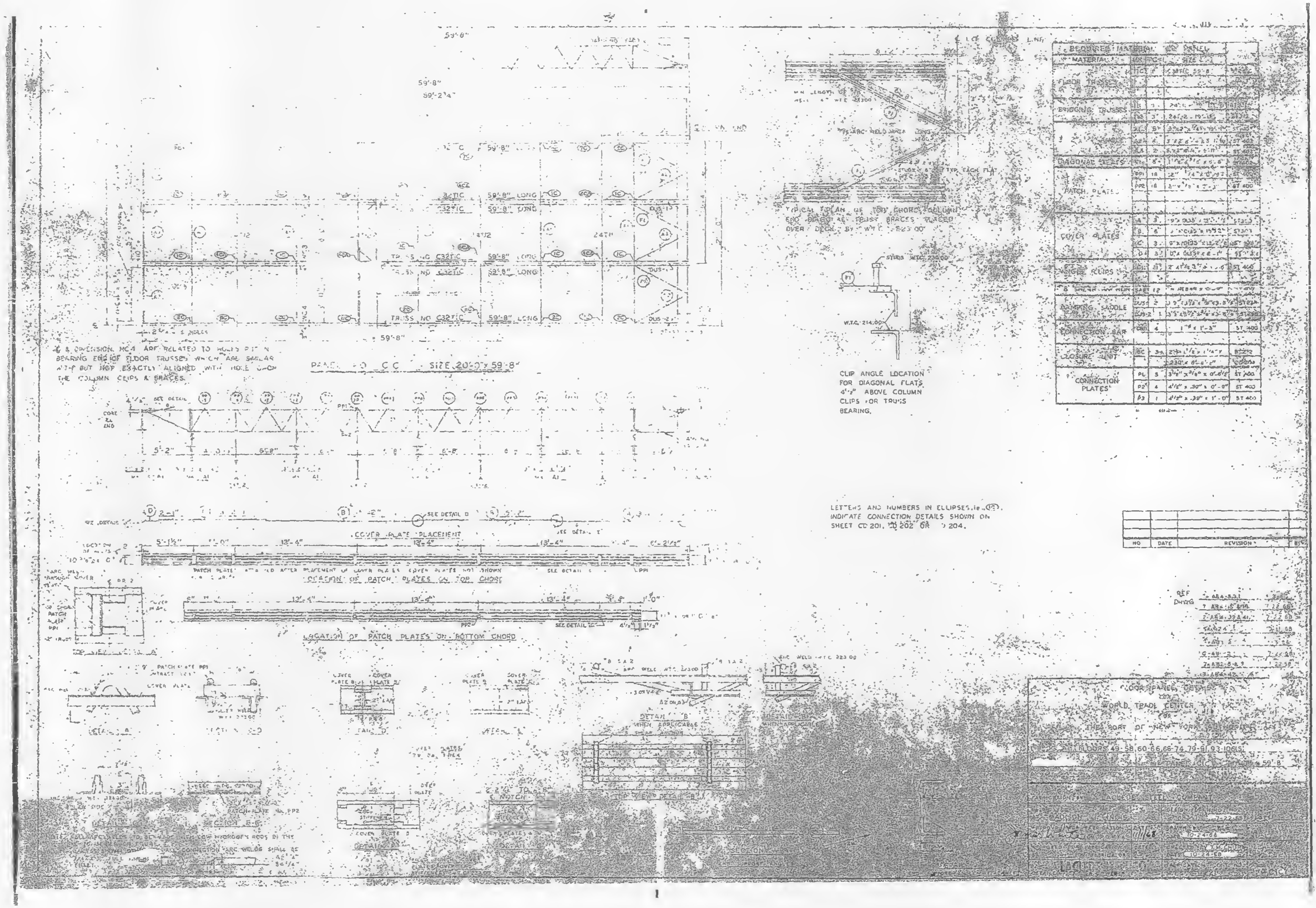
DESIGN DRAWING 7-22-68

DRAWN DATE 10-24-68

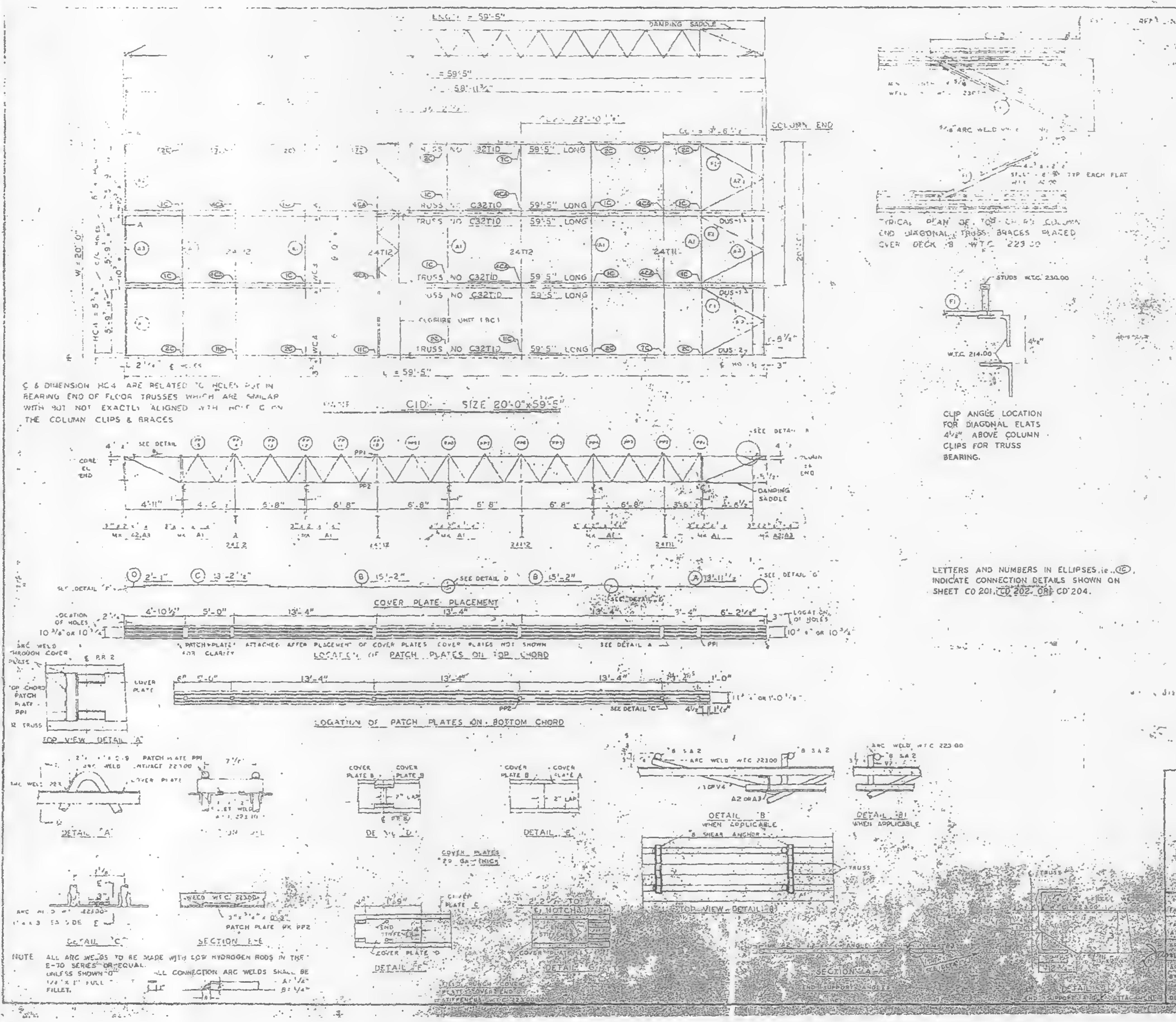
CHECKED T. A. CHURK DATE 10-24-68

APPROVED FOR FABRICATION 11/1/68

C1B


59'-8"
59'-2¼"
C32TTC 59'-8" LONG
TRUSS NO. C32TTC 59'-8" LONG
DUS-1
DUS-2
& DIMENSION MC4 ARE RELATED TO HOLES IN THE BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE IN THE COLUMN CLIPS & BRACES.
PLAN OF PANEL CC SIZE 20'-0" x 59'-8"
SEE DETAIL
5'-2"
COVER PLATE PLACEMENT
SEE DETAIL D
5'-1½"
13'-4"
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
TOP VIEW DETAIL "A"
PATCH PLATE PP1
COVER PLATE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
SECTION B-B
PATCH PLATE No. PP2
TYPICAL PLAN OF TOP CHORD, COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
ARC WELD W.T.C. 223.00
STUDS W.T.C. 223.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
LETTERS AND NUMBERS IN ELLIPSES, i.e. (F1), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.
NO
DATE
REVISION
REF DWG
7-AB2-39 & 41
7-22-68
7-AB2-8 & 9
7-22-68
FLOOR PANEL DETAILS
WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY
FLOORS 49-58, 60-66, 68-74, 79-91, 93-106(S)
PANEL CC
59'-8"
LACLEDE STEEL COMPANY
MADISON, ILLINOIS
7-22-68
10-24-68
10-24-68

| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | TTC | 2 | C32TTC 59'-8 | [illegible] |
| BRIDGING TRUSSES | TB1 | 1 | [illegible] | [illegible] |
| | TB2 | 3 | 24T-2 - 19'-1½ | ST212 |
| [illegible] | [illegible] | 5 | [illegible] | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | 2 | [illegible] | ST 402 |
| DIAGONAL FLATS | [illegible] | 5 | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 18 | [illegible] | [illegible] |
| | PP2 | 18 | [illegible] | ST 400 |
| COVER PLATES | A | 3 | [illegible] | ST 203 |
| | B | 6 | [illegible] | ST 203 |
| | C | 3 | [illegible] | [illegible] |
| | D | 3 | [illegible] | [illegible] |
| ANGLE CLIPS | [illegible] | [illegible] | [illegible] | ST 400 |
| [illegible] | [illegible] | 12 | [illegible] | [illegible] |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | [illegible] |
| | DUS-2 | 1 | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | [illegible] | [illegible] | ST212 |
| | | | [illegible] | [illegible] |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 0'-8½" | ST 400 |
| | P2 | 4 | 4½" x .30" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |


L = 59'-5"
DAMPING SADDLE
58'-11 3/4"
COLUMN END
TRUSS NO. C32T1D 59'-5" LONG
24T12
24T11
DUS-1
DUS-2
PANEL C1D - SIZE 20'-0"x59'-5"
C & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES
CORE END
COLUMN END
DAMPING SADDLE
4'-11"
6'-8"
5'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL "A"
DETAIL "A"
DETAIL "B"
DETAIL "B1"
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
SECTION E-E
SECTION A-A
COVER PLATES 20 GA. THICK
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK 'B' W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 2" FULL FILLET.

| REQUIRED MATERIAL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | | |
| FLOOR TRUSSES | T1D | 6 | [illegible] 59'-5 | [illegible] |
| [illegible] TRUSSES | T1L | 1 | [illegible] | |
| | T1Z | 3 | [illegible] | [illegible] |
| [illegible] ANGLE | A1 | 5 | 3"x2"[illegible] | ST 403 |
| | A2 | 4 | 3"x2"[illegible] | ST 403 |
| | A3 | 2 | 3"x2"[illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST 302 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] | ST 400 |
| COVER PLATES | A | 3 | 9"x 0135" x [illegible] | ST 303 |
| | B | 6 | 9" x 0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x 0135" x 13'-4 1/2" | ST 303 |
| | C | 3 | 5" x 0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 21 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | ST 298 |
| | DUS-2 | 1 | 3 1/2 x 3 1/2" x 3/8" x 3'-8 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | 2 [illegible] x 1 1/2" x 1 1/4" x [illegible] | ST 212 |
| | | | 230 x 6', 8 1/2" | CD 204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

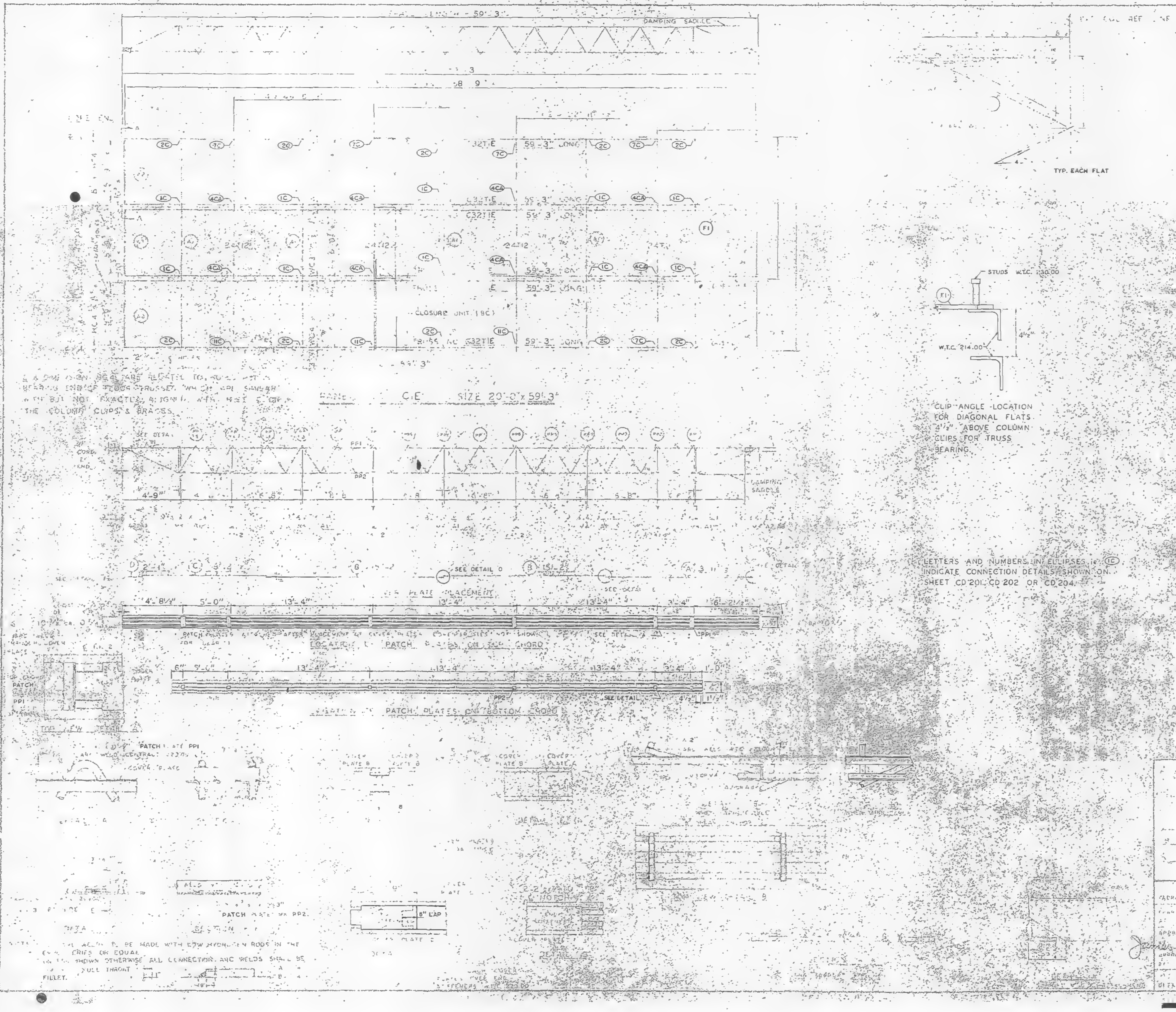
REF. DWG.

| | |
|---|---|
| [illegible] | 7-22-68 |
| [illegible] | 7-22-68 |
| 39 & 41 | 7-22-68 |
| SA [illegible] | 9-11-68 |
| 7-193 | 1-3-68 |
| [illegible] 2 | 7-22-68 |
| [illegible] | 7-22-68 |
| 584-42 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A - FLOORS 81-82 (N)
PANEL C1D 20'-0" x 59'-5"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS.
DESIGN DRAWING NO. 7-A83-7 7-22-68 PLATE
APPROVED FOR FABRICATION James White FOR PORT AUTH. DATE 11/1/68
DRAWN BY [illegible] DATE 10-24-68
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE 10-24-68
IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-C1D



A DIMENSION 9'-6" ARE RELATIVE TO ... BEARING END OF FLOOR TRUSSES, WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH ... THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTES: ... ALL ... BE MADE WITH E70 LOW HYDROGEN RODS IN THE ... CRIES OR EQUAL. ... SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ... FULL THROAT ... FILLET.

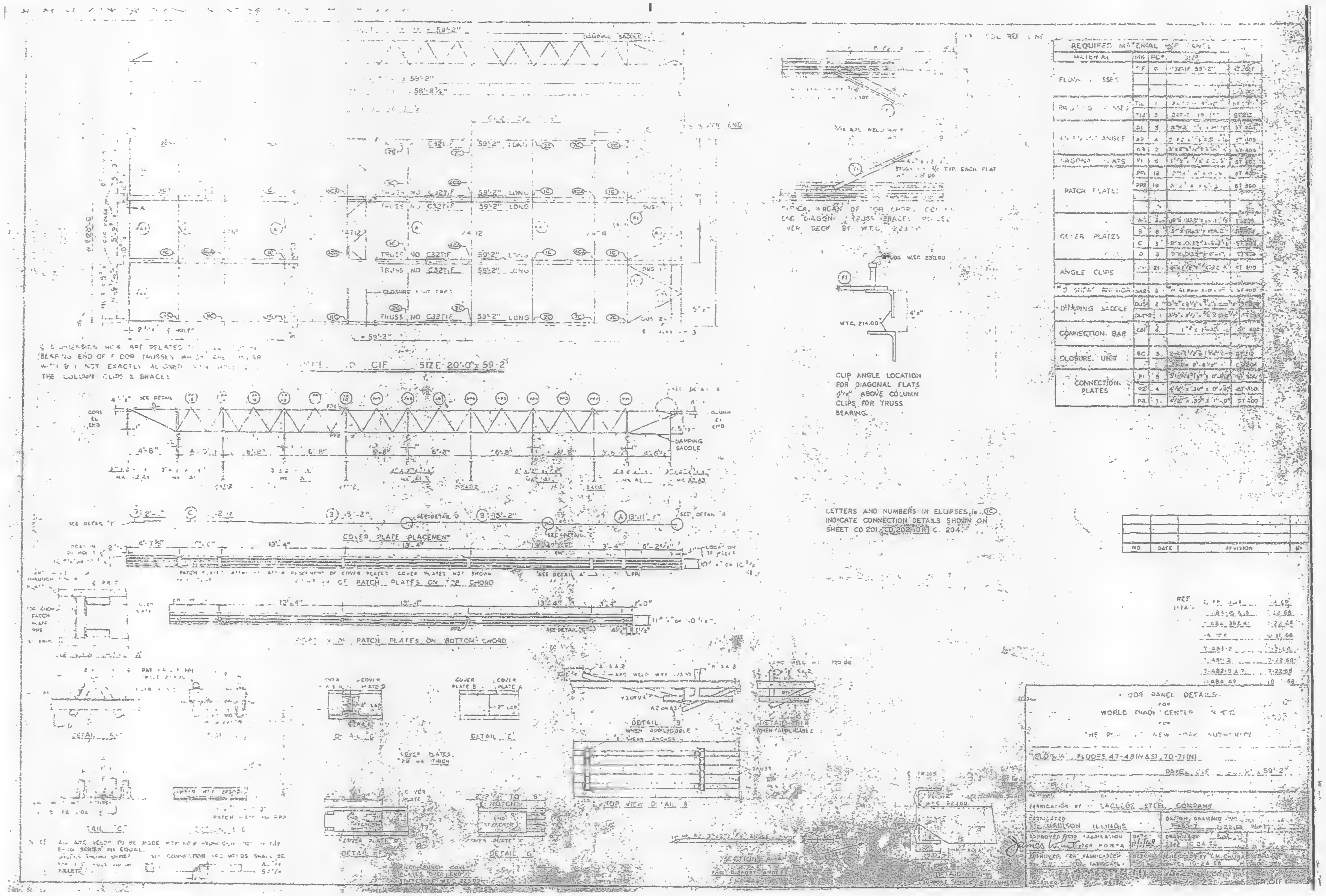
| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | [illegible] | | | |
| | T12 | 3 | [illegible] | ST 212 |
| | [illegible] | 5 | [illegible] | ST 403 |
| | [illegible] | [illegible] | [illegible] | ST 403 |
| | [illegible] | [illegible] | [illegible] | ST 403 |
| [illegible] | | | | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] 3" | ST 400 |
| COVER PLATES | [illegible] | 3 | [illegible] | [illegible] |
| | [illegible] | 6 | [illegible] | [illegible] |
| | [illegible] | 3 | [illegible] | [illegible] |
| | [illegible] | 3 | [illegible] x 2'-1" | [illegible] |
| ANGLE CLIPS | [illegible] | 21 | 2 x 3" x [illegible] 6 | ST 400 |
| SHEAR ANCHOR | SA2 | 9 | #5 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] 6⅞ | ST 298 |
| | [illegible] | 1 | [illegible] 6⅞ | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1 [illegible] x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | 2-[illegible] 1½" x 1¼ x<br>210 x 6'-6½" | ST 212<br>CD 204 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 0'-6½" | ST 400 |
| | P2 | 4 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |

| | | | |
|---|---|---|---|
| △1 | 7-17-68 | GENERAL | T.M.C. |
| NO. | DATE | REVISION | BY |

REF. DWGS.
[illegible] 4-3-68
[illegible] 5-6-68
[illegible] 41 1-3-68
SA [illegible] 6-20-67
[illegible] 1-8-68
[illegible] 2-5-68
[illegible] 4-5-68
[illegible] 42 4-1-68

[illegible] 10-11 (NORTH & SOUTH)
[illegible] C1E [illegible] 3

FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. AB3 7 4-1-68
APPROVED FOR FABRICATION FOR PUB. W.Y.E. DATE 8/16/68
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. DATE
DRAWN BY [illegible] DATE APRIL 15, 1968
CHECKED BY L.R. PAUL DATE APRIL 19, 1968
IN CHARGE OF PROD. DEV.
DESIGNED BY J.R.S. NEECH
FABRICATION CONT. NO. 221
SHEET NO. FP C1E



DIMENSIONS ARE RELATED TO BEARING END OF FLOOR TRUSSES WHICH ARE WITH BUT NOT EXACTLY ALIGNED WITH THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD CONNECTION AND DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CO 201, CO 202 OR C. 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OF THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FILLETS.

| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PC# | SIZE | |
| FLOOR TRUSSES | T1F | 6 | C32T1F 59'-2" | ST 20F |
| BRIDGING TRUSSES | T1L | 1 | [illegible] | [illegible] |
| | T14 | 3 | 24T-2 - 19'-[illegible] | ST 212 |
| [illegible] ANGLE | A1 | 5 | 3"x2" [illegible] | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | 2 | 3"x2"x¼"x5'-[illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½"x⅜"x[illegible] | ST 362 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] | ST 360 |
| COVER PLATES | A | 3 | 9"x.0135"x[illegible] | [illegible] |
| | B | 6 | [illegible] | [illegible] |
| | C | 3 | 9"x.0132"x3'-2½" | ST 403 |
| | D | 3 | 9"x.0135"x[illegible] | [illegible] |
| ANGLE CLIPS | [illegible] | 21 | [illegible] | ST 400 |
| [illegible] | SA2 | 9 | [illegible] | ST 400 |
| DAMPING SADDLE | DUS1 | 2 | 3½"x3½"x[illegible] | [illegible] |
| | DUS2 | 1 | 3½"x3½"x[illegible] | [illegible] |
| CONNECTION BAR | CB1 | 4 | [illegible] | ST 400 |
| CLOSURE UNIT | BC | 3 | [illegible] | [illegible] |
| | | | [illegible] | [illegible] |
| CONNECTION PLATES | P1 | 5 | [illegible] | [illegible] |
| | P2 | 4 | 4½"x.30"x 0'-[illegible] | ST 400 |
| | P3 | 1 | 4½"x.30"x 1'-0" | ST 400 |

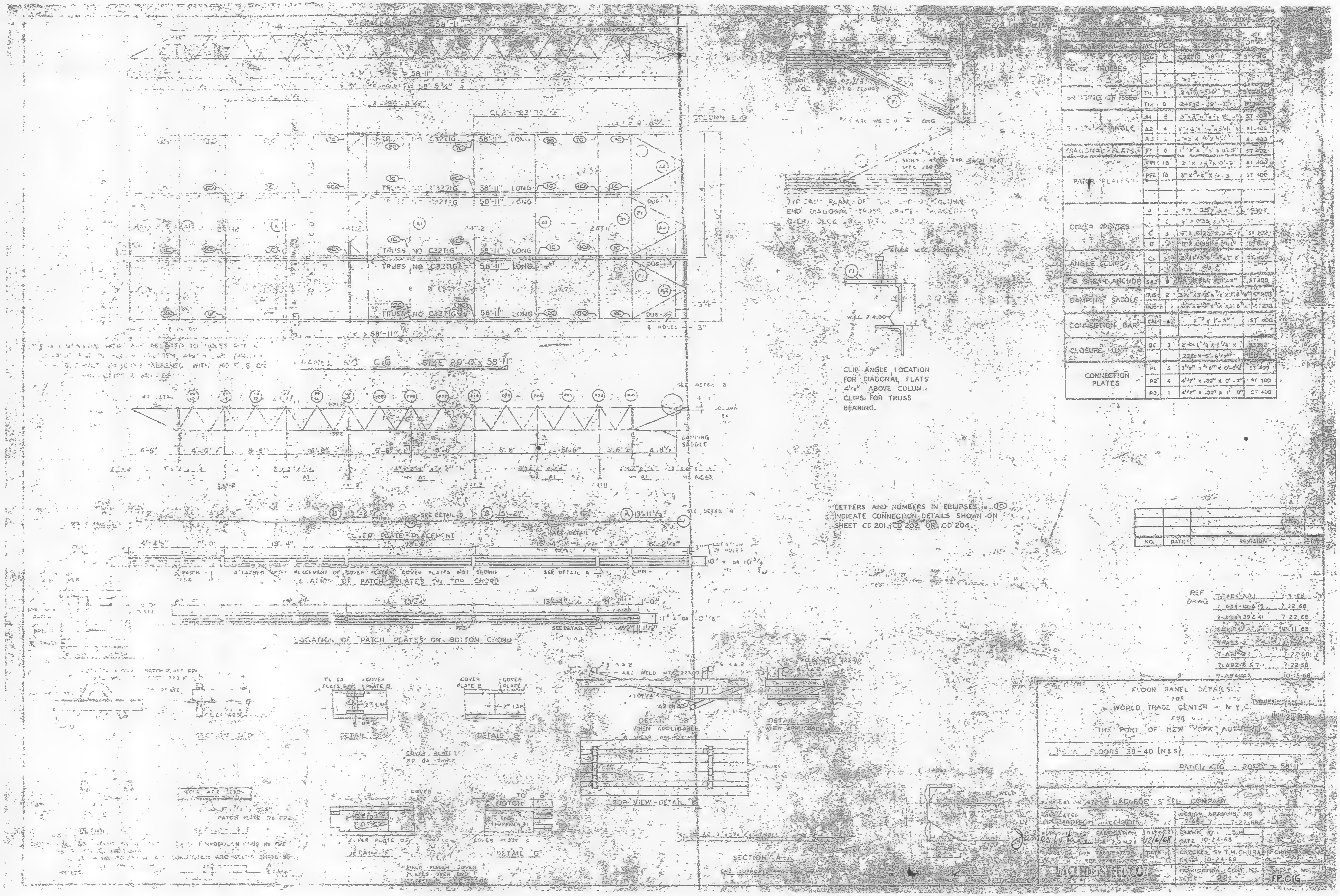
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

| REF DRAW. | |
|---|---|
| [illegible] | [illegible] |
| [illegible] | 7-22-68 |
| [illegible] A84 39&41 | 7-22-68 |
| [illegible] | [illegible] 11-68 |
| 7-A81-2 | [illegible] |
| 7-A81-3 | 7-22-68 |
| 7-A82-9 & 7 | 7-22-68 |
| [illegible] A84-47 | 10 58 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48 (N & S), 70-71 (N)
PANEL C1F [illegible] x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED [illegible] MADISON ILLINOIS
DESIGN DRAWING NO. [illegible] 7-22-68
APPROVED FOR FABRICATION FOR PORT A. James White DATE 11/1/68
DRAWN BY [illegible] DATE 10-24-68
APPROVED FOR FABRICATION [illegible] FABRICATOR
CHECKED BY T.M. CHURA DATE 10-24-68
DETAILED BY [illegible]
FABRICATION CODE NO. [illegible]
SHEET [illegible] C1F



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. ⓘ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

| MATERIAL | MK | PCS | SIZE | REF DRWG |
|---|---|---|---|---|
| FLOOR TRUSSES | 1G | 5 | C32T1G 58'-11" | [illegible] |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T1 | 1 | [illegible] | [illegible] |
| | T1 | 3 | [illegible] | [illegible] |
| ANGLE | A1 | 8 | [illegible] | ST [illegible] |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | [illegible] | [illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | [illegible] | [illegible] |
| | | [illegible] | [illegible] | |
| | C | 3 | [illegible] | ST 402 |
| | G | 3 | [illegible] | [illegible] |
| ANGLE CLIPS | C1 | 21 | [illegible] | ST 400 |
| | | | | |
| 8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR [illegible] | ST 400 |
| DAMPING SADDLE | DUS | 2 | [illegible] | ST 208 |
| | DUS-2 | [illegible] | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | 4 | [illegible] x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | [illegible] | [illegible] |
| | | | 230 x 6'-6½" | [illegible] |
| CONNECTION PLATES | P1 | 5 | 3½" x [illegible] | ST 400 |
| | P2 | 4 | 4½" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |

| NO. | DATE | REVISION |
|---|---|---|
| | | |
| | | |
| | | |

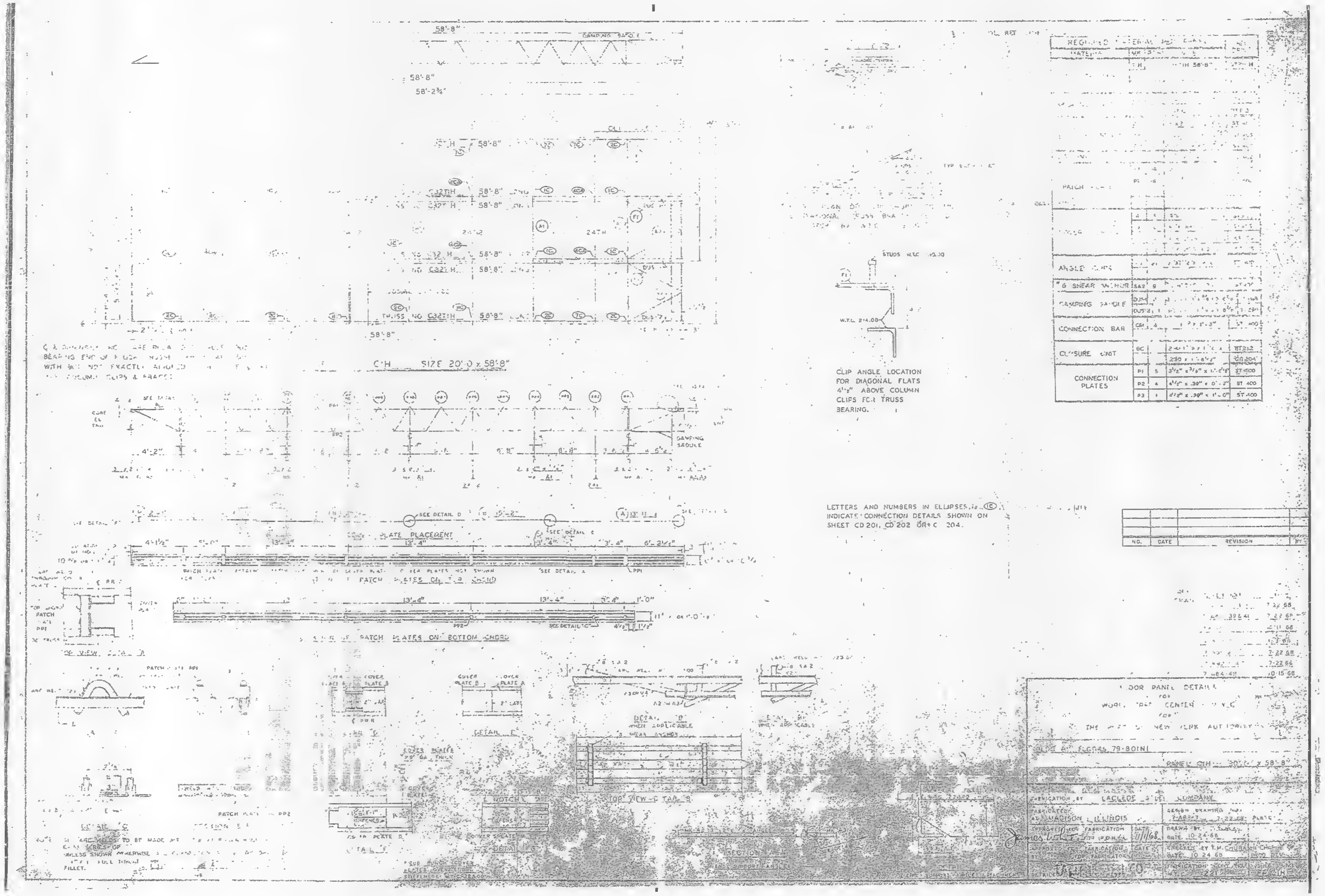
REF DRWG
7-AB4-[illegible] 7-3-68
7-AB4-[illegible] 7-22-68
7-AB4-39 & 41 7-22-68
[illegible] 10-11-68
[illegible]
7-AB1-2 7-22-68
7-AB2-6 & 7 7-22-68
7-AB4-[illegible] 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

[illegible] FLOORS 39-40 (N&S)

PANEL C1G 20'-0" x 58'-11"

LACLEDE STEEL COMPANY
DESIGN DRAWING NO 7-AB3-7 7-22-68
FABRICATION 12/6/68
DRAWN BY [illegible] DATE 10-24-68
CHECKED BY T.M. CHURAZ DATE 10-24-68
LACLEDE STEEL CO.
FABRICATION CONT. NO. SHEET NO. FP-C1G



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

| REQUIRED MATERIAL | | | | |
|---|---|---|---|---|
| PATCH | | | | |
| ANGLE CLIPS | | | | |
| #6 SHEAR ANCHOR | SA2 | 9 | | |
| DAMPING SADDLE | DU54 | | | |
| | DU52 | 1 | | |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | | | BT212 |
| | | | 230 | CD 204 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 1'-6½" | ST 400 |
| | P2 | 4 | 4½" x .39" x 0'-3" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

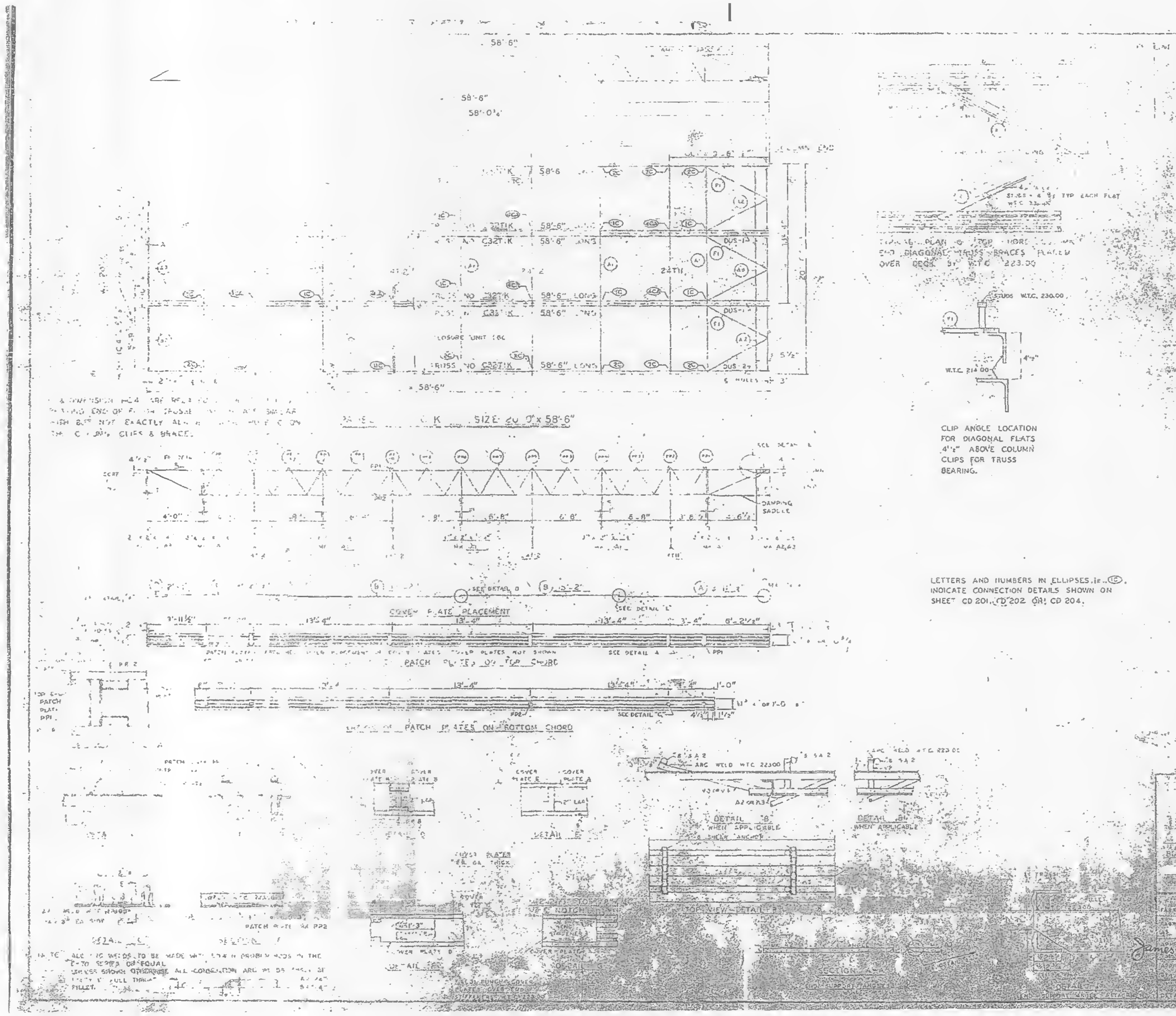
39841 7-22-68
7-22-68
7-22-66
10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. FLOORS 79-80 (N)

PANEL C/H 20'-0" x 58'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-22-68
APPROVED FOR FABRICATION James White P.O.N.Y.A. DATE 11/1/68
DRAWN BY DATE 10-24-68
APPROVED FOR FABRICATION BY FOR FABRICATORS DATE
CHECKED BY T.M. CHURA DATE 10-24-68
FABRICATION SHEET NO. 221
DETAILED BY



STUDS × 4 ⅝ TYP EACH FLAT

PLAN OF TYP. HORIZ. END DIAGONAL TRUSS BRACES PLACED OVER DECK ST. W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. ⓘⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

| | | | | |
|---|---|---|---|---|
| REQUIRED MATERIAL | | | | |
| FLOOR TRUSSES | [illegible] | 6 | [illegible] × 58'-6" | [illegible] |
| BRIDGING TRUSSES | T11 | | 24T[illegible] | [illegible] |
| | T12 | 3 | [illegible] | [illegible] |
| 3"×2"×[illegible] ANGLE | A1 | 5 | [illegible] | ST 4[illegible] |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | 2 | [illegible] | ST 4[illegible] |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] | ST 400 |
| COVER PLATES | A | 3 | 5"× .0135" × 13'-[illegible] | ST 303 |
| | B | 6 | 9"× .0135" × 13'-2" | ST 303 |
| | C | 3 | 9"× .0135" × 13'-2" | ST 303 |
| | D | 3 | 9"× .0135" × 2'-4" | ST 20[illegible] |
| ANGLE CLIPS | C1 | 21 | 2"×1½"×[illegible] | ST 403 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR × 0'-8" | ST 40[illegible] |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | [illegible] |
| | DUS-2 | 1 | 3½"×3½"×⅜"×3'-8⅞" | ST 275 |
| CONNECTION BAR | CB1 | 4 | [illegible] × 1'-3" | ST 400 |
| CLOSURE UNIT | [illegible] | 3 | 2 [illegible] 1½" × 1½" × [illegible] | [illegible] |
| | | | 230 × [illegible] | ST 294 |
| CONNECTION PLATES | P1 | 5 | 3½" × ¼" × 0'-5½" | ST 400 |
| | P2 | 4 | 4½" × .30" × 1'-9" | ST 400 |
| | P3 | 1 | 4½" × .30" × 1'-0" | ST 400 |

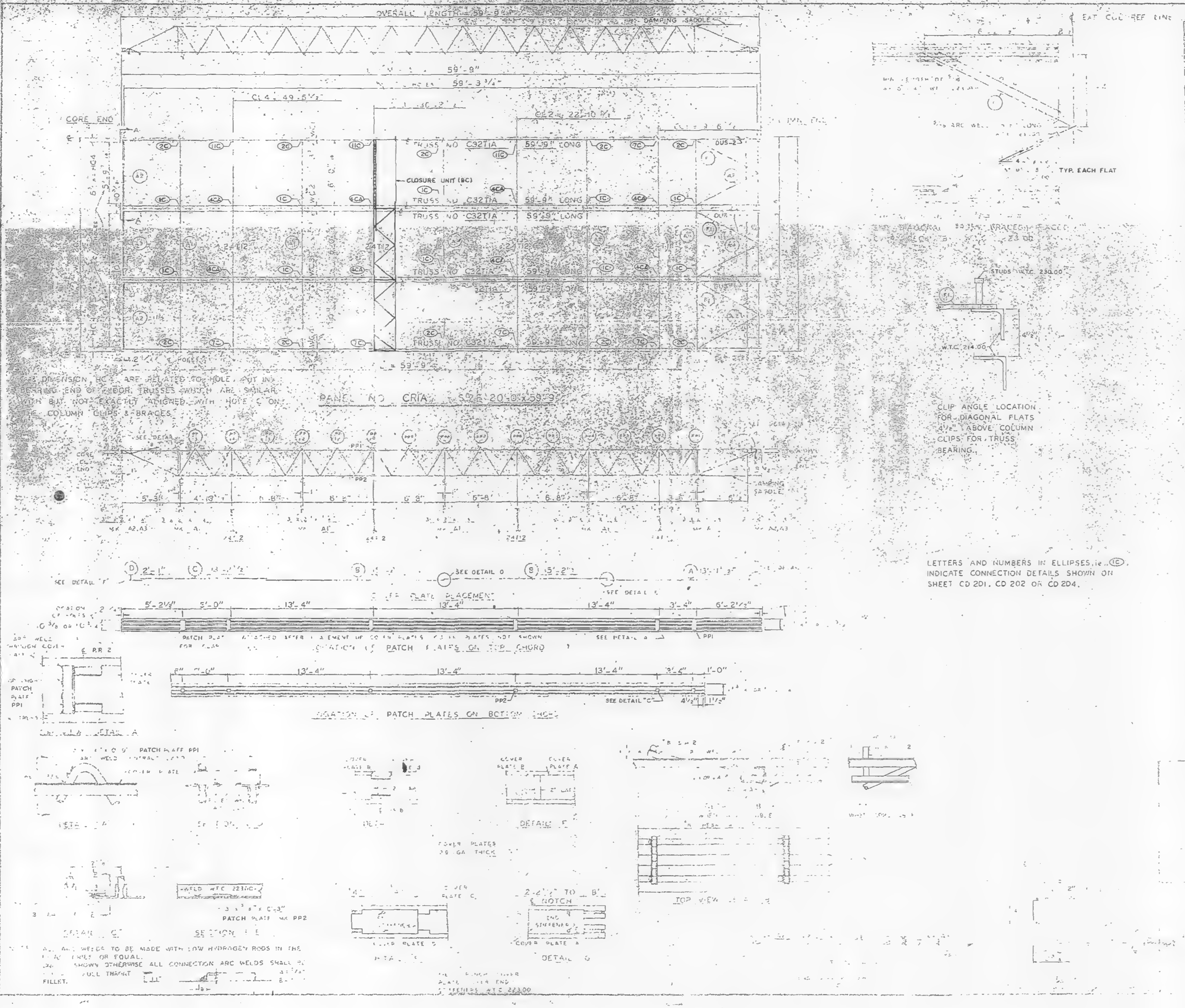
| NO. | DATE | REVISION | |
|---|---|---|---|
| | | | |
| | | | |

REF DRWG
- 7-AB4-3[illegible] [illegible]
- 7-AB4-3[illegible] 7-22-68
- 7-AB4-39 & 41 7-22-68
- SA-[illegible] 10-11-68
- 7-AB3-2 [illegible]
- 7-AB1-7 7-22-68
- 7-A53-6 & 7 7-22-68
- 7-AB4-42 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45(S), 46(N & S)
PANEL C1K 20'-0" × 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A53-7 7-22-68
APPROVED FOR FABRICATION James White DATE 11/1/68
DRAWN BY [illegible] DATE 10-24-68
CHECKED BY T.M. CHURA DATE 10-24-68
LACLEDE STEEL CO.



DIMENSION "HC" ARE RELATED TO HOLE PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⓒ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTES: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET.

| REQUIRED MATERIAL FOR PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| [illegible] | [illegible] | 6 | [illegible] 59'-9 | [illegible] |
| [illegible] | | | | |
| [illegible] | [illegible] | 1 | 24T [illegible] | [illegible] |
| | TL | 3 | 24T12 19'-[illegible]" | BT 212 |
| [illegible] | A1 | [illegible] | [illegible] | ST 403 |
| | A2 | [illegible] | [illegible] | ST 403 |
| | [illegible] | [illegible] | [illegible] | ST 403 |
| [illegible] | [illegible] | [illegible] | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] 3" | ST 400 |
| COVER PLATES | [illegible] | 3 | [illegible] | ST 303 |
| | B | 6 | [illegible] x 0.135 x 13'-2" | ST 303 |
| | [illegible] | 3 | [illegible] x 0135 x 13'-2 1/2" | ST 303 |
| | C | 3 | [illegible] x 0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | [illegible] | 21 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] x 6 7/8" | ST 295 |
| | DS-2 | 1 | [illegible] x 6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1 [illegible] x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | 2-4 x 1 1/2" x 1 1/4" x | BT 212 |
| | | | 230 x 3' 6 1/2" | CD 204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| △ | 7-17-68 | GENERAL | T.M.C. |

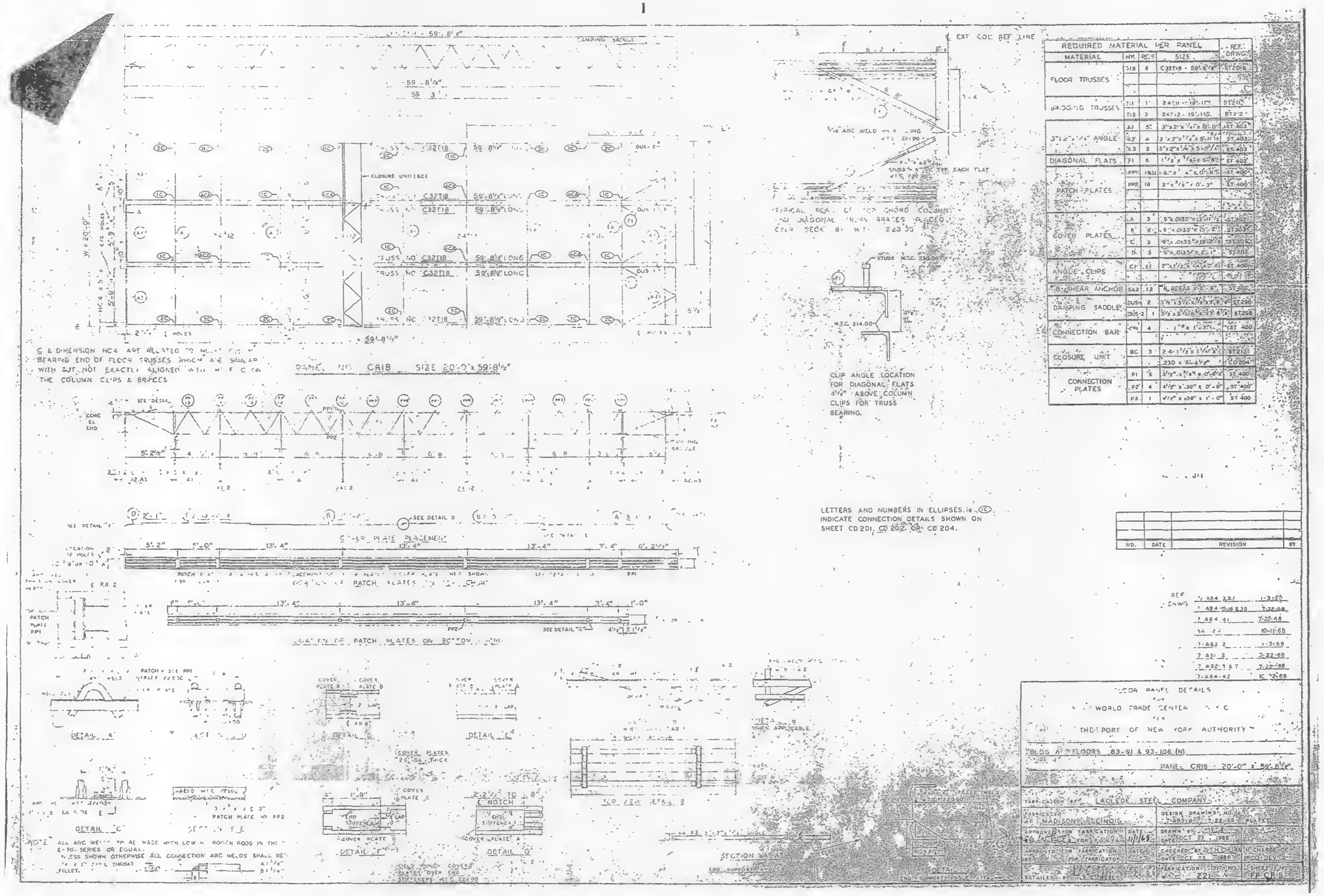
5-0-68

CRIA

8/16/68

SHEET CRIA

1



C & DIMENSION HC4 ARE RELATED TO HOLE C/L OF BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C/L ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ⅛" x 1" [illegible] THROAT FILLET.

A: ¼"
B: ¼"

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T18 | 6 | C32T18 - 59'-8½" | ST 208 |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11⅞ | BT 211 |
| | T12 | 3 | 24T12 - 19'-11⅞ | BT 212 |
| 3"x2"x¼" ANGLE | A1 | 5 | 3"x2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1¼"x 5'-11" | ST 403 |
| | A3 | 2 | 3"x2"x¼"x 5'-11¾" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅜" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 21 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 12 | #6 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2 ∠ 1½" x 1¼" x | BT 212 |
| | | | 230 x 6'-8½" | CD 204 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 0'-6½" | ST 400 |
| | P2 | 4 | 4½" x .30" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |

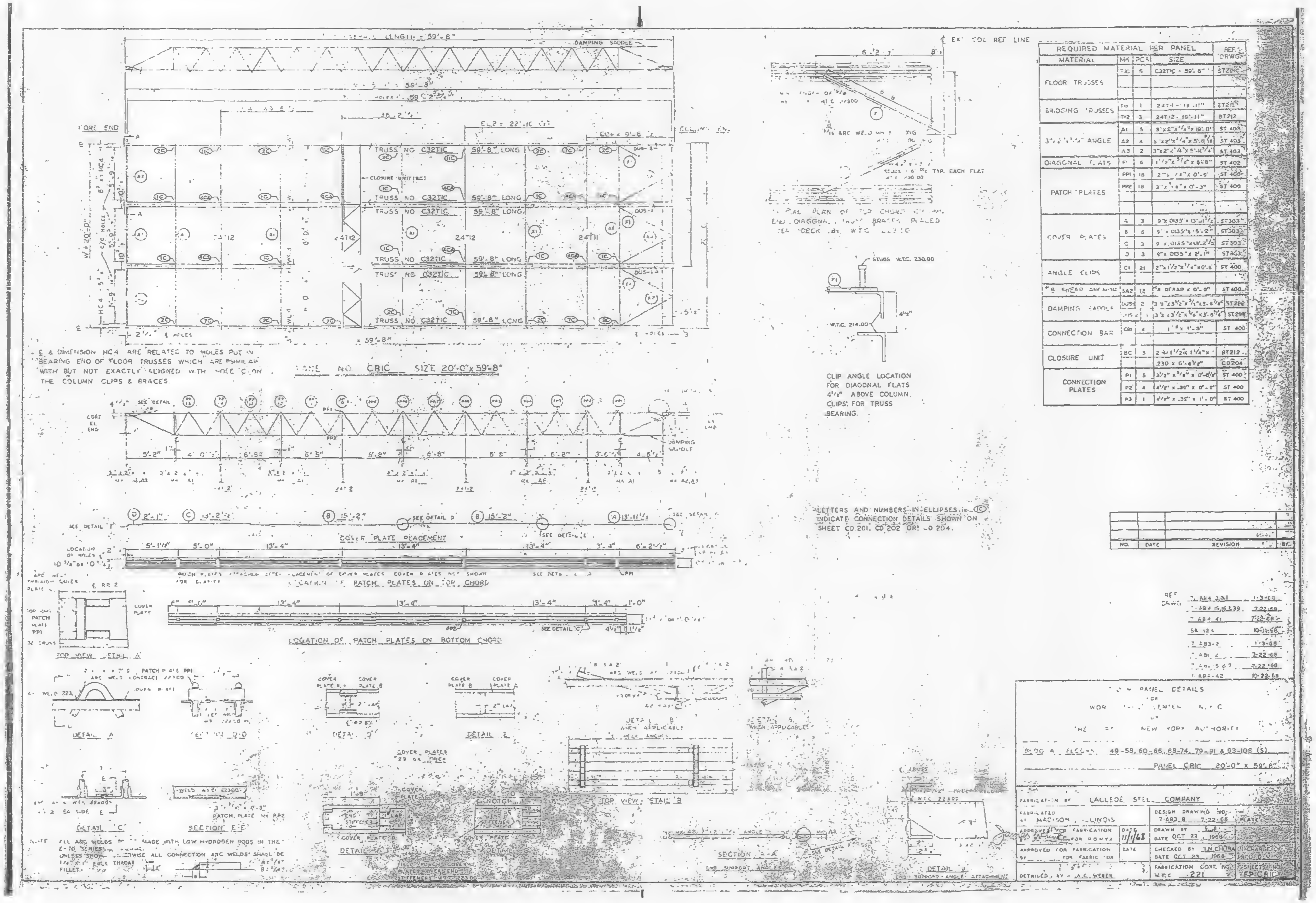
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

REF DRWG
7 AB4 33.1 — 1-3-68
7 AB4 15,16 & 39 — 7-22-68
7 AB4 41 — 7-22-68
5A 22 — 10-11-65
7-AB3 2 — 1-3-68
7 AB1 2 — 7-22-68
7 AB2-4 & 7 — 7-22-68
7-AB4-42 — 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 83-91 & 93-106 (N)
PANEL CRIB · 20'-0" x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-8 7-22-68 PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 11/1/68
DRAWN BY [illegible] DATE OCT 23 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M.C. DATE OCT 23 1968
IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP CRIB



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES (e.g. 1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T1C | 6 | C32T1C - 59'-8" | ST201C |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 1/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 5 | 1 1/2" x 3/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-1 1/2" | ST303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 21 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHORS | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS4 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST298 |
| | DUS2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST298 |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2 4/1 1/2" x 1 1/4" x | BT212 |
| | | | 230 x 6'-6 1/2" | CD204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .35" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .35" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
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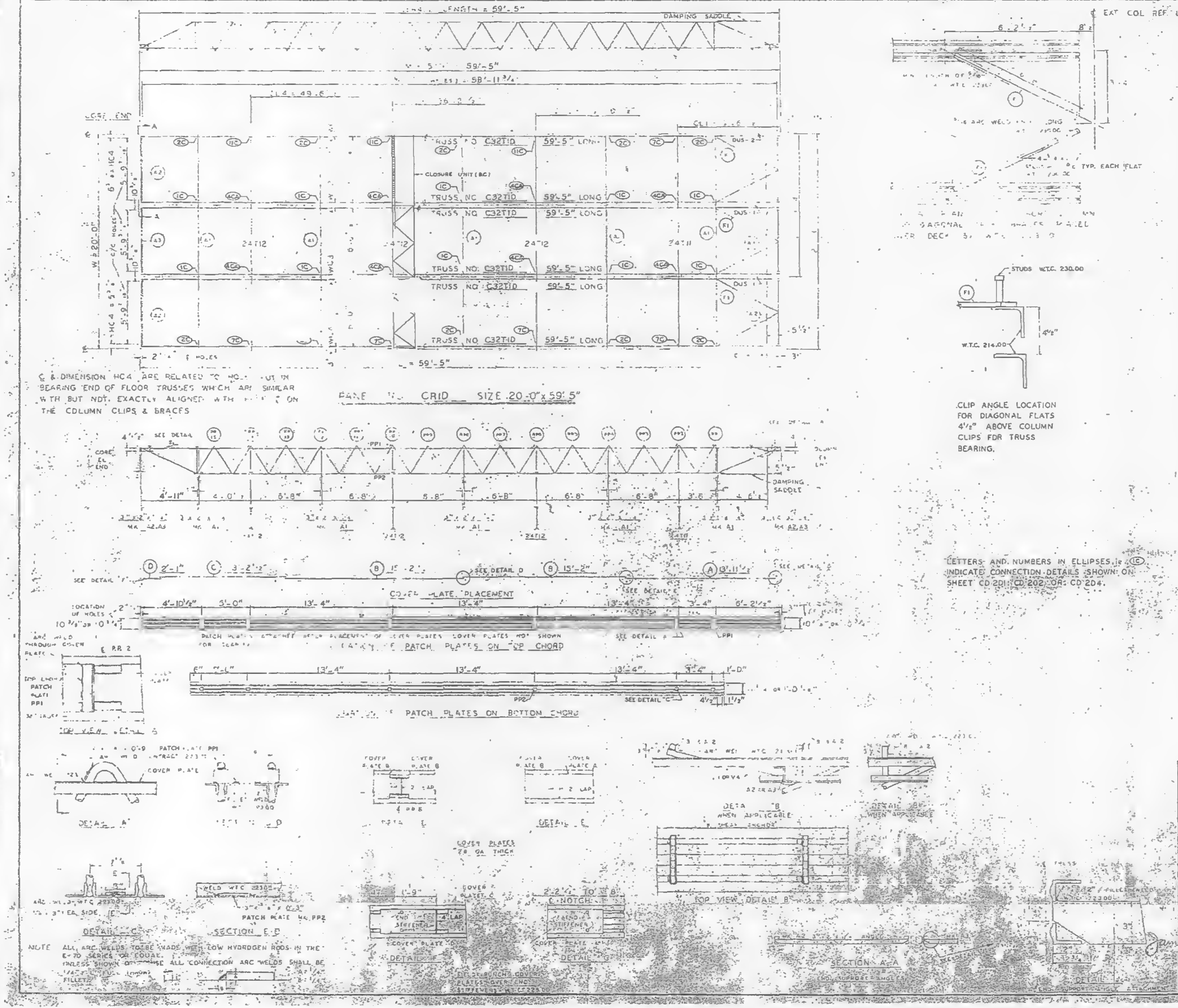
| | | | |
| | | | |

| REF. DRWG. | |
|---|---|
| 7-AB4 3,3,1 | 1-3-68 |
| 7-AB4 15,16,239 | 7-22-68 |
| 7-AB4 41 | 7-22-68 |
| SA 124 | 10-11-68 |
| 7-AB3-7 | 1-3-68 |
| 7-AB1 4 | 7-22-68 |
| 7-AB4 5,6,7 | 7-22-68 |
| 7-AB4-42 | 10-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 49-58, 60-66, 68-74, 79-91 & 93-106 (S)
PANEL CRIC 20'-0" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3 8 7-22-68
PLATE
APPROVED FOR FABRICATION BY James White FOR PONYA DATE 11/1/68
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DRAWN BY DATE OCT 23, 1968
CHECKED BY T.M. CHURA DATE OCT 23, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP CRIC


LENGTH = 59'-5"
DAMPING SADDLE
59'-5"
58'-11 3/4"
TRUSS NO C32T10 59'-5" LONG
CLOSURE UNIT (BC)
TRUSS NO C32T10 59'-5" LONG
24T12
24T11
DUS-2
DUS-1
59'-5"
℄ & DIMENSION HC4 ARE RELATED TO HOLE CUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH ℄ ON THE COLUMN CLIPS & BRACES
PANEL GRID SIZE 20'-0" x 59'-5"
SEE DETAIL
PP1
PP2
DAMPING SADDLE
4'-11"
4'-0"
6'-8"
5'-8"
3'-6"
COVER PLATE PLACEMENT
4'-10 1/4"
5'-0"
13'-4"
5'-4"
6'-2 1/2"
PATCH PLATES ON TOP CHORD
PATCH PLATES ON BOTTOM CHORD
13'-4"
1'-0"
SEE DETAIL "C"
SEE DETAIL D
DETAIL A
SECTION D-D
DETAIL E
DETAIL B WHEN APPLICABLE
DETAIL C
SECTION E-E
COVER PLATES 28 GA THICK
TOP VIEW DETAIL B
SECTION A-A
PATCH PLATE
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FILLETS
EXT COL REF LINE
6'-2"
TYP. EACH FLAT
DIAGONAL FLATS
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T10 | 6 | C32T10 - 59'-5" | ST2010 |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 1/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 21 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS1 | 2 | 3"x2"x3 1/2"x 3/8"x3'-6 7/8" | ST296 |
| | DUS 2 | 1 | 3"x2"x3 1/2"x 3/8"x3'-6 7/8" | ST296 |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | 2"x1 1/2"x 1 3/4"x | BT212 |
| | | | 230 x 6'-6 1/2" | CD204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
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| | | | |

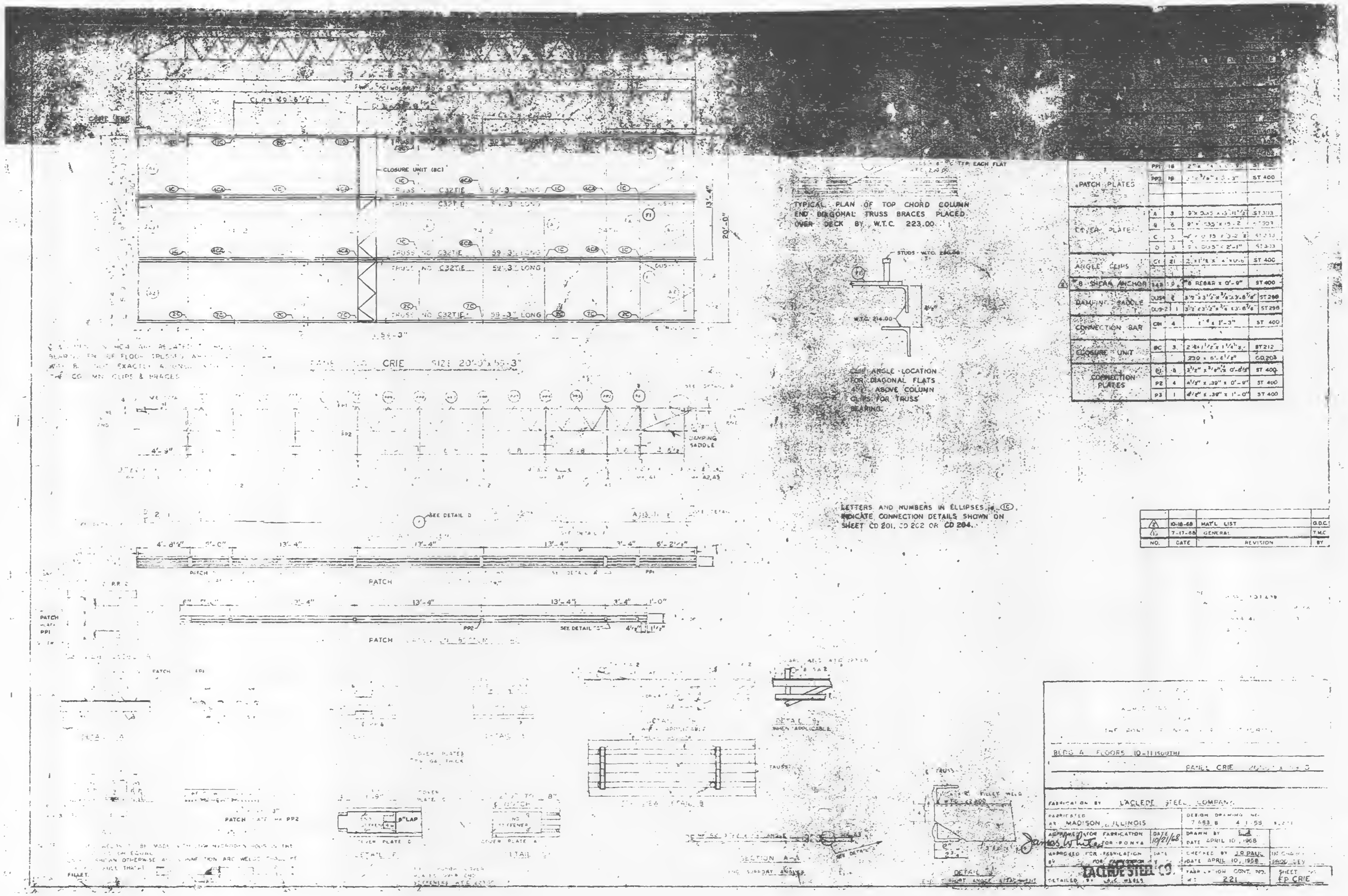
| REF DRWG | |
|---|---|
| 7-AB4-3,3,1 | 1-3-68 |
| 7-AB4-15,16 & 39 | 7-22-68 |
| 7-AB4-41 | 7-22-68 |
| SA 124 | 10-11-68 |
| 7-AB3-2 | 8-68 |
| 7-AB-2 | 7-22-68 |
| 7-3B-5 & 7 | 7-22-68 |
| 7-AB4-42 | 10-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 81-82 (N)

PANEL GRID 20'-0" x 59'-5"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-8 7-22-68 PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A DATE 11/1/68
DRAWN BY DATE OCT 23, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M.CHURA DATE OCT 23, 1968
IN CHARGE OF PROD DEV
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO FP GRID



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

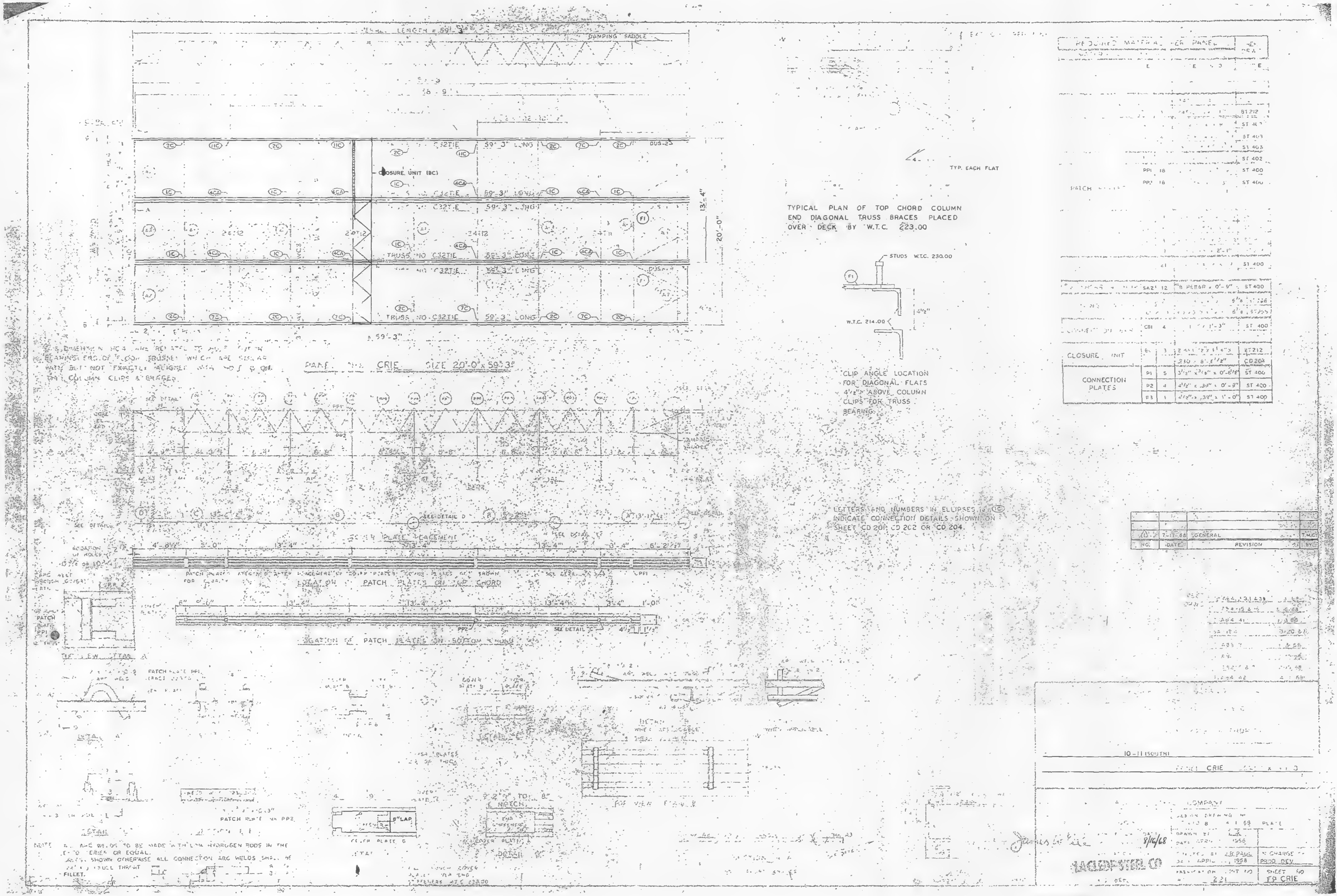
LETTERS AND NUMBERS IN ELLIPSES ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

|  |  |  |  |  |
|---|---|---|---|---|
| PATCH PLATES | PP1 | 18 | 2" x [illegible] x 0'-9" | ST 400 |
|  | PP2 | 19 | [illegible] x ⅜" x 3'-3" | ST 400 |
| COVER PLATE | A | 3 | 9" x 0.35 x 13'-11½" | ST 303 |
|  | B | 6 | 9" x .335" x 13'-2 | ST 303 |
|  | C | 3 | [illegible] x 0.15 x 3'-2" | ST 303 |
|  | D | 3 | 9" x 0.35" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 21 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| △2 #8 SHEAR ANCHOR | 348 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 298 |
|  | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 298 |
| CONNECTION BAR | CH | 4 | 1" ø x 1'-3" | ST 400 |
| CLOSURE UNIT | 8C | 3 | 2 4 x 1½" x 1¼" x [illegible] | ST 212 |
|  |  |  | 230 x 6'-8½" | CD 203 |
| CONNECTION PLATES | P1 | 8 | 3½" x ⅜" x 0'-8⅝" | ST 400 |
|  | P2 | 4 | 4½" x .39" x 0'-9" | ST 400 |
|  | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| △2 | 10-18-68 | MAT'L LIST | G.D.C. |
| △1 | 7-17-68 | GENERAL | T.M.C. |

BLDG A FLOORS 10-11 (SOUTH)
PANEL CRIE

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 483 B 4-1-58
APPROVED FOR FABRICATION FOR P.O.N.Y.A. James White DATE 10/21/68
DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY LACLEDE STEEL CO.
CHECKED BY J.R. PAUL DATE APRIL 10, 1968
IN CHARGE PROD. [illegible]
DETAILED BY [illegible]
FABRICATION CONT. NO. 221
SHEET NO. FP CRIE



PANEL CRIE SIZE 20'-0" x 59'-3"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

LETTERS AND NUMBERS IN ELLIPSES ie (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET.

REQUIRED MATERIAL FOR PANEL

| | | | | |
|---|---|---|---|---|
| | | | | ST 212 |
| | | | | ST 403 |
| | | | | ST 403 |
| | | | | ST 403 |
| | | | | ST 402 |
| PATCH PLATES | PP1 | 18 | | ST 400 |
| | PP2 | 18 | | ST 400 |
| | | | 2'-1" | |
| | | 21 | | ST 400 |
| | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| | | | | ST 258 |
| | | | | ST 255 |
| | CB1 | 4 | 1'-3" | ST 400 |
| CLOSURE UNIT | 8C | 3 | [illegible]<br>210 x 5'-8½" | ST 212<br>CD 204 |
| CONNECTION PLATES | P1 | 5 | 3½" x 3/8" x 0'-6½" | ST 400 |
| | P2 | 4 | 4½" x .38" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .38" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| 1 | 7-17-68 | GENERAL | T.M.G. |

10-11 (SOUTH)

PANEL CRIE

COMPANY

PLATE

DRAWN BY: L.Z.
DATE: APRIL 1968

CHECKED BY: E.B. PAUL
DATE: APRIL 1968

IN CHARGE OF: PROD. DEV.

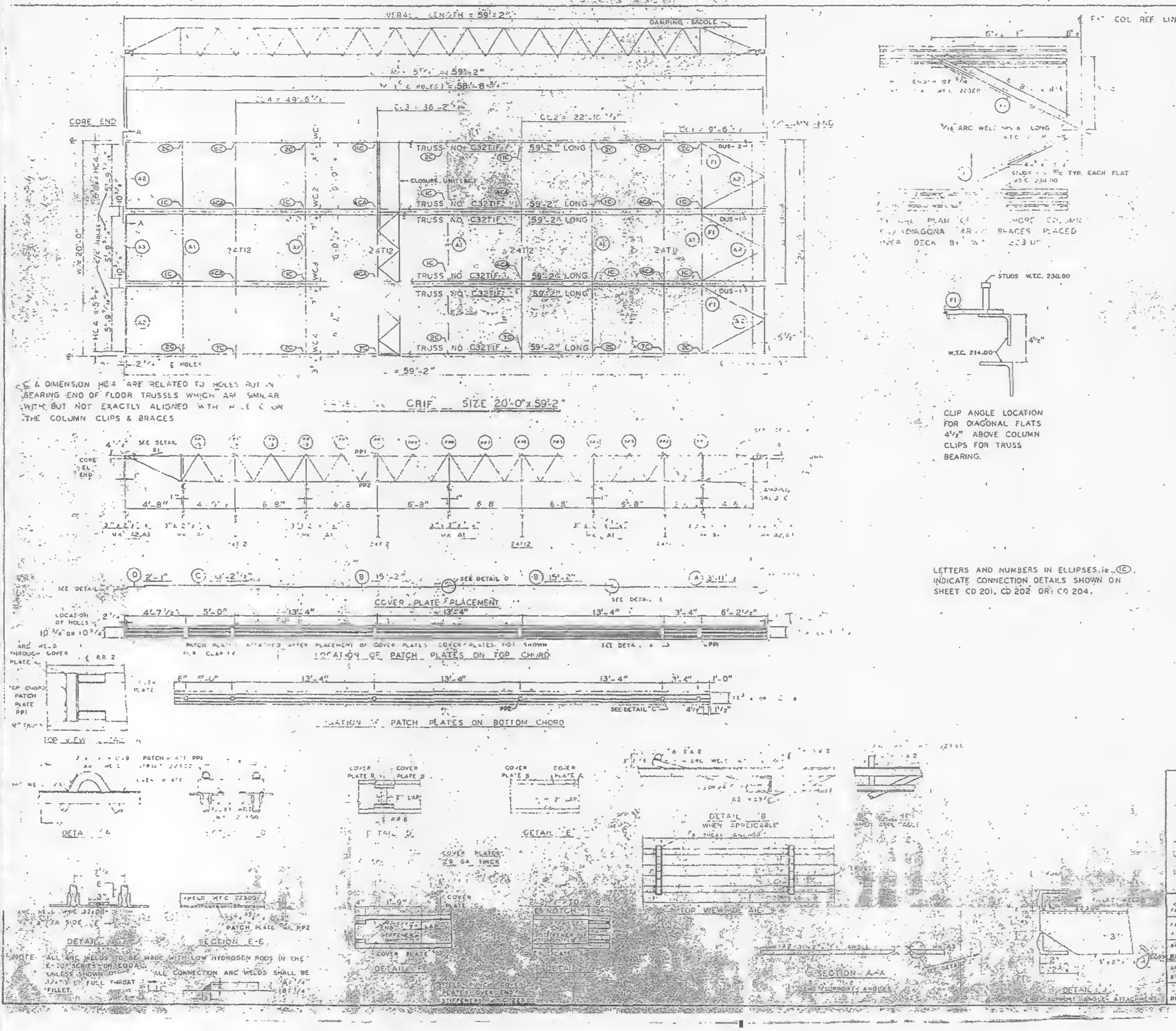
FABRICATION UNIT NO. 221

SHEET NO. FP CRIE

8/16/68

PACIFIC STEEL CO

[redacted]



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO CRIF SIZE 20'-0" x 59'-2"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T1F | 6 | C32T1F - 59'-2" | ST201FA |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11 1/2" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| 3"x2"x1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x5'-11 9/16" | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 5 | 1 1/2"x 3/8"x 6'-5/8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/4"x 0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9"x 0135"x 13'-11 1/2" | ST303 |
| | B | 6 | 9"x 0135"x 15'-2" | ST303 |
| | C | 3 | 9"x .0135"x 13'-2 1/2" | ST303 |
| | D | 3 | 9"x 0135"x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 21 | 2"x 1 1/2"x 1/4"x 0'-6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST298 |
| | DUS-2 | 1 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST299 |
| CONNECTION BAR | CB1 | 4 | 1 #8 x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2-4 x 1 1/2"x 1 1/4"x | BT212 |
| | | | .230 x 6'-6 1/2" | CD204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2"x 3/8"x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x .39"x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

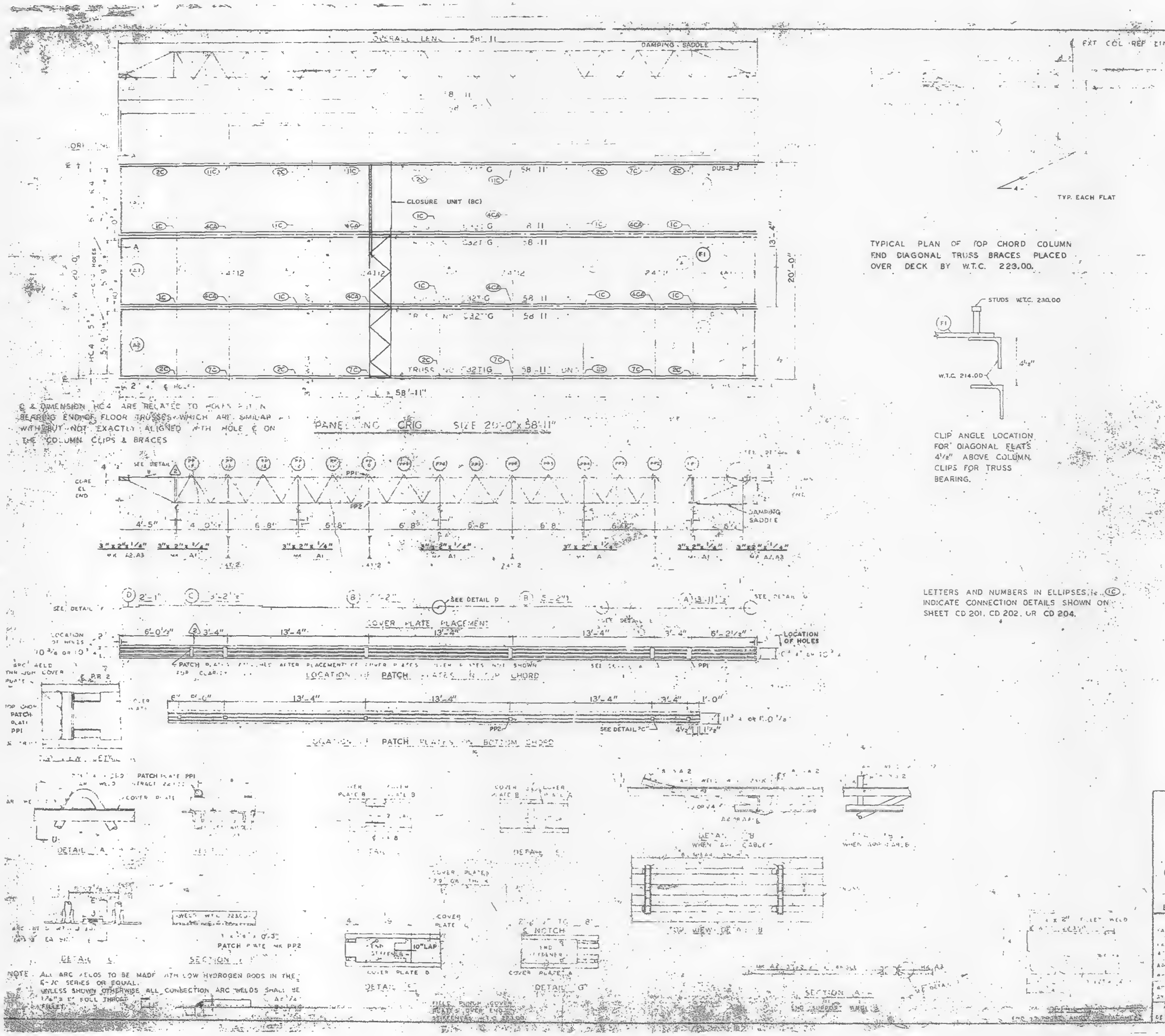
7-AB4-5,6 & 39 7-22-68
7-AB4-41 7-22-68
7-A..24 10-11-68
7-AB3-2 11-3-68
7-AB1 7-22-68
7-AB2 5 & 7 7-22-68
7-AB4-42 10-22-68

[illegible] DETAILS
FOR
[illegible] TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A COLUMNS 47-48 (S) 47-48, 70-71 (N)
PANEL CRIF 20'-0" x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-AB3-8 7-22-68 PLATE | |
| APPROVED FOR FABRICATION James W. [illegible] FOR P.O.N.Y.A. | DATE 11/1/68 | DRAWN BY [illegible] DATE OCT 23, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.N. CHURA DATE OCT 23, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED BY L.A.C. WEBER | | FABRICATION CONT. NO. WTC 221 | SHEET NO. FP CRIF |



℄ & DIMENSION HC4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. ⓘⓒ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 2" FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | TIG | 6 | C32TIG - 58'-11" | T2TIG |
| | | | | |
| | | | | |
| [illegible] TRUSSES | T11 | 1 | 24T [illegible] - 19'-1" | BT211 |
| | T12 | 3 | 24T12 - 19'-1" | BT212 |
| [illegible] ANGLE | A1 | 3 | 3" x 2" x 1/4 x 9'-1" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4 x 5'-9/16 | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4 x 5'-[illegible] | ST 403 |
| [illegible] | F | 6 | [illegible] x 5'-6 | ST 102 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] x 0'-3" | ST 400 |
| | | | | |
| COVER PLATES | A | 3 | [illegible] | [illegible] |
| | B | 6 | [illegible] x 0.35" x 5'-2 | [illegible] |
| | C | 3 | 9" x 0.35" x 3'-2 | [illegible] |
| | D | 3 | 9" x 0.35" x 2'-[illegible] | ST 303 |
| ANGLE CLIPS | C1 | 21 | 2" x 1 1/2" x [illegible] x 6" | ST 400 |
| #8 SHEAR ANCHOR | SS2 | 9 | #8 [illegible] x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | [illegible] |
| | DUS 2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | [illegible] |
| CONNECTION BAR | CB1 | 4 | [illegible] x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | 2 x 1 1/2 x 1 1/4 x | BT 212 |
| | | | 230 x 64 [illegible] | CD 204 |
| CONNECTION PLATES | P1 | 5 | [illegible] x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

| | | | |
|---|---|---|---|
| ② | 6-9-68 | AS NOTED | G.D.C. |
| ① | 7-17-68 | GENERAL | T.N.L. |
| NO. | DATE | REVISION | BY |

② REF. DRWG

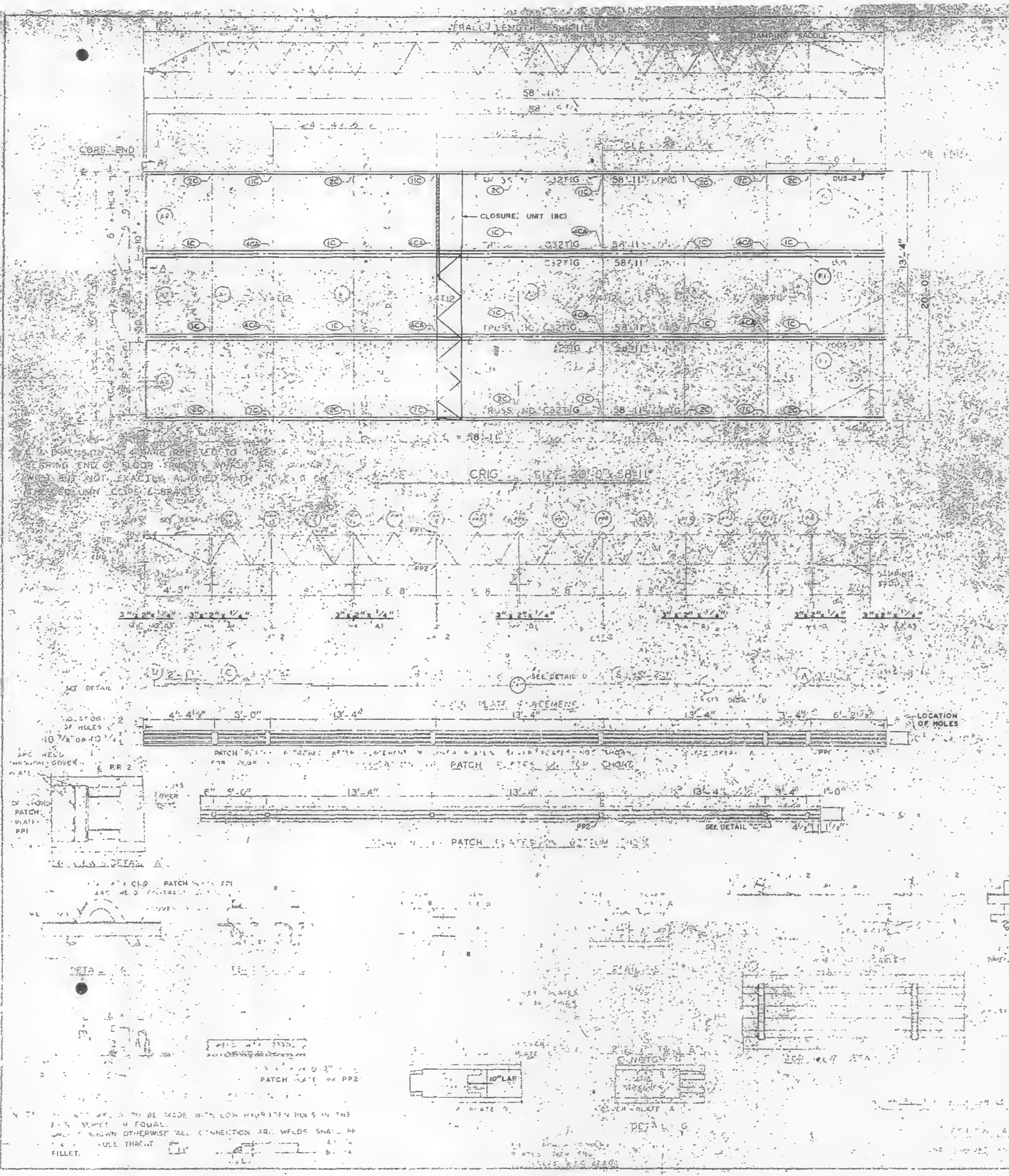
| | |
|---|---|
| 7-AB4 3 | 10-15-68 |
| 7-AB4 [illegible] & [illegible] | 7-22-68 |
| 7-AB4 41 | 7-22-68 |
| [illegible] | 1-6-69 |
| 7-AB3-2 | [illegible]-3-68 |
| 7-AB4 2 | 7-22-68 |
| 7-AB4 6 & [illegible] | 7-22-68 |
| 7-AB4 42 | 10-15-68 |

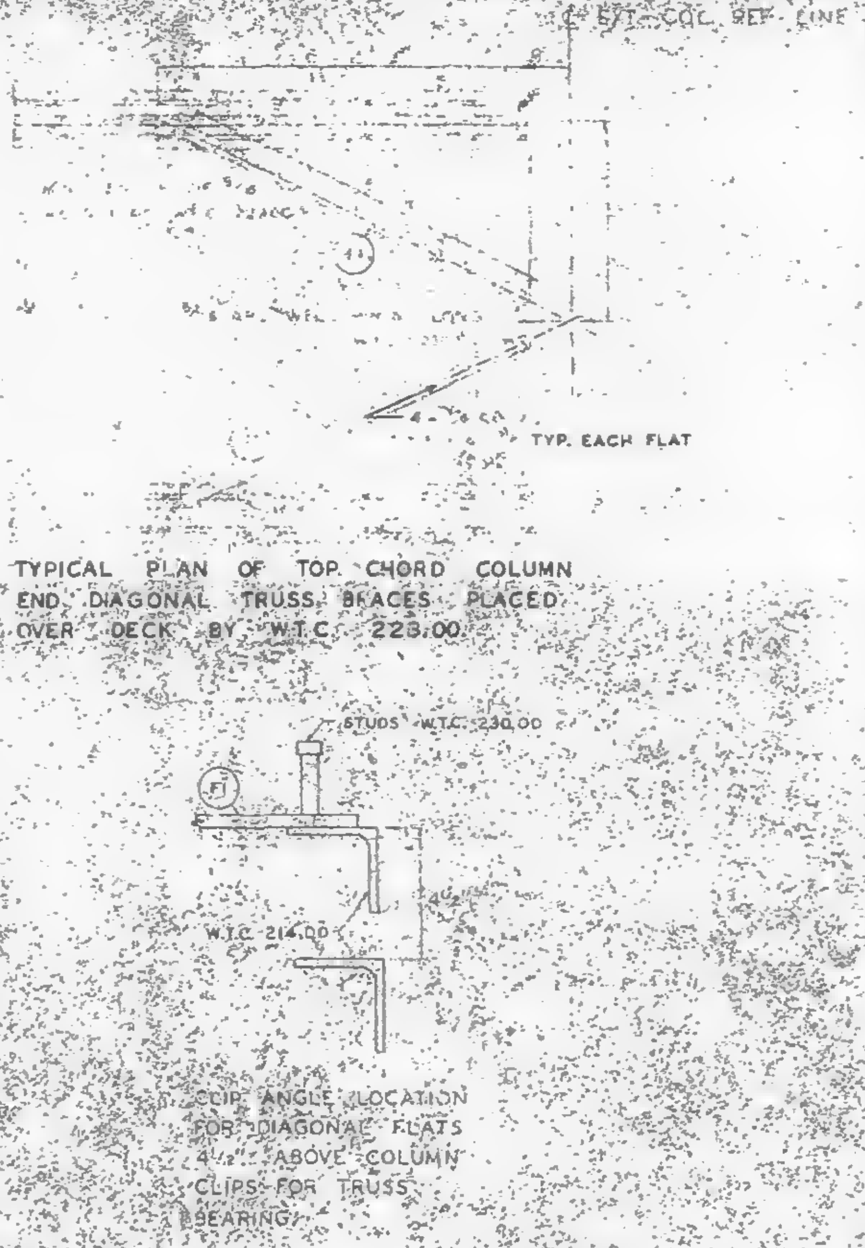
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39 (NORTH & SOUTH) 40 (SOUTH) [illegible] (NORTH)
PANEL CRIG [illegible] 58'-11"
BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) ②

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| ARCHITECTS: MINORU YAMASAKI & ASSOCIATES | | DESIGN DRAWING NO 7-AB3-8 | PLATE |
| APPROVED FOR FABRICATION FOR [illegible] | DATE 1/7/69 | DRAWN BY [illegible] DATE APRIL 10, 1968 | |
| APPROVED FOR FABRICATION FOR FABRICATOR | DATE | CHECKED BY J.R. PAUL DATE APRIL 10, 1968 | IN CHARGE OF PROD. REV. |
| DETAILED BY A.E. WEBER | | FABRICATION CONT. NO. W.T.C. [illegible] | SHEET NO. FP CRIG |





TYPICAL PLAN OF TOP CHORD COLUMN END. DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | [illegible] | SIZE | |
| [illegible] | IG | [illegible] | C32TIG - 58'-11" | ST 296 |
| [illegible] | IC | 3 | 24T12 - [illegible] | BT 212 |
| [illegible] ANGLE | A1 | 3 | [illegible] | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | [illegible] | [illegible] | [illegible] | ST 403 |
| [illegible] | [illegible] | [illegible] | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 16 | [illegible] 3" | ST 400 |
| COVER PLATES | A | 3 | [illegible] | ST 303 |
| | B | 6 | [illegible] | ST 303 |
| | C | 3 | [illegible] | ST 303 |
| | D | 3 | [illegible] x 2'-1" | ST 303 |
| ANGLE CLIPS | [illegible] | 21 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | ST 296 |
| | [illegible] | 1 | [illegible] | ST 296 |
| CONNECTION BAR | CB1 | 4 | [illegible] x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | [illegible] | BT 212<br>CD 204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

LETTERS AND NUMBERS IN ELLIPSES i.e. ⓘC INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

| | | | |
|---|---|---|---|
| 1 | 7-17-68 | GENERAL | T.M.C. |
| NO. | DATE | REVISION | BY |

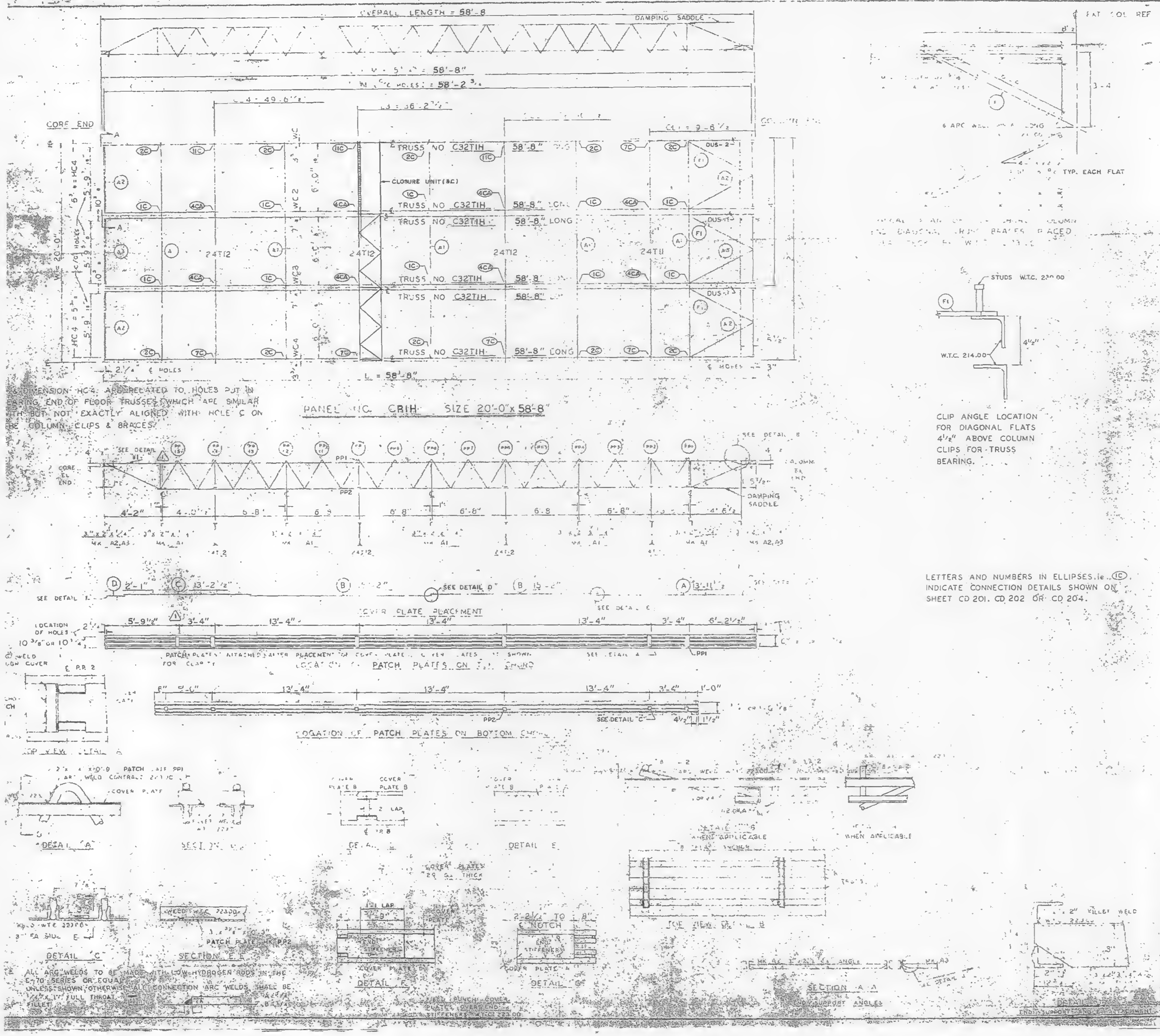
39 (NORTH & SOUTH) 40 (SOUTH) 10-11 (NORTH)

CRIG 8'-11"

James White 8/16/68

LACLEDE STEEL CO.

SHEET NO.
FP CRIG



6 DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON CORE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⓒ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T1H | 6 | C32T1H - 58'-8" | ST201H |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| 3"x2"x1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11 1/2" | ST303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST303 |
| | C | 3 | 9"x .0135"x 13'-2 1/2" | ST303 |
| | D | 3 | 9"x .0135"x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 21 | 2"x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2" x 3/8" x 3'-6 7/8" | ST298 |
| | DUS-2 | 1 | 3 1/2"x 3 1/2" x 3/8" x 3'-6 7/8" | ST298 |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2-L 1 1/2"x 1 1/4" x | ST212 |
| | | | 230 x 6'-6 1/2" | CD204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| ⚠1 | 6-9-69 | AS NOTED | G.O.C. |

| ⚠1 REF. DRWG. | |
|---|---|
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15,16 & 39 | 7-22-68 |
| 7-AB4-41 | 7-22-68 |
| SA-12 4 | 1-69 |
| 7-AB3-2 | 4-3-68 |
| 7-AB1-2 | 7-22-68 |
| 7-AB2-6 & 7 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

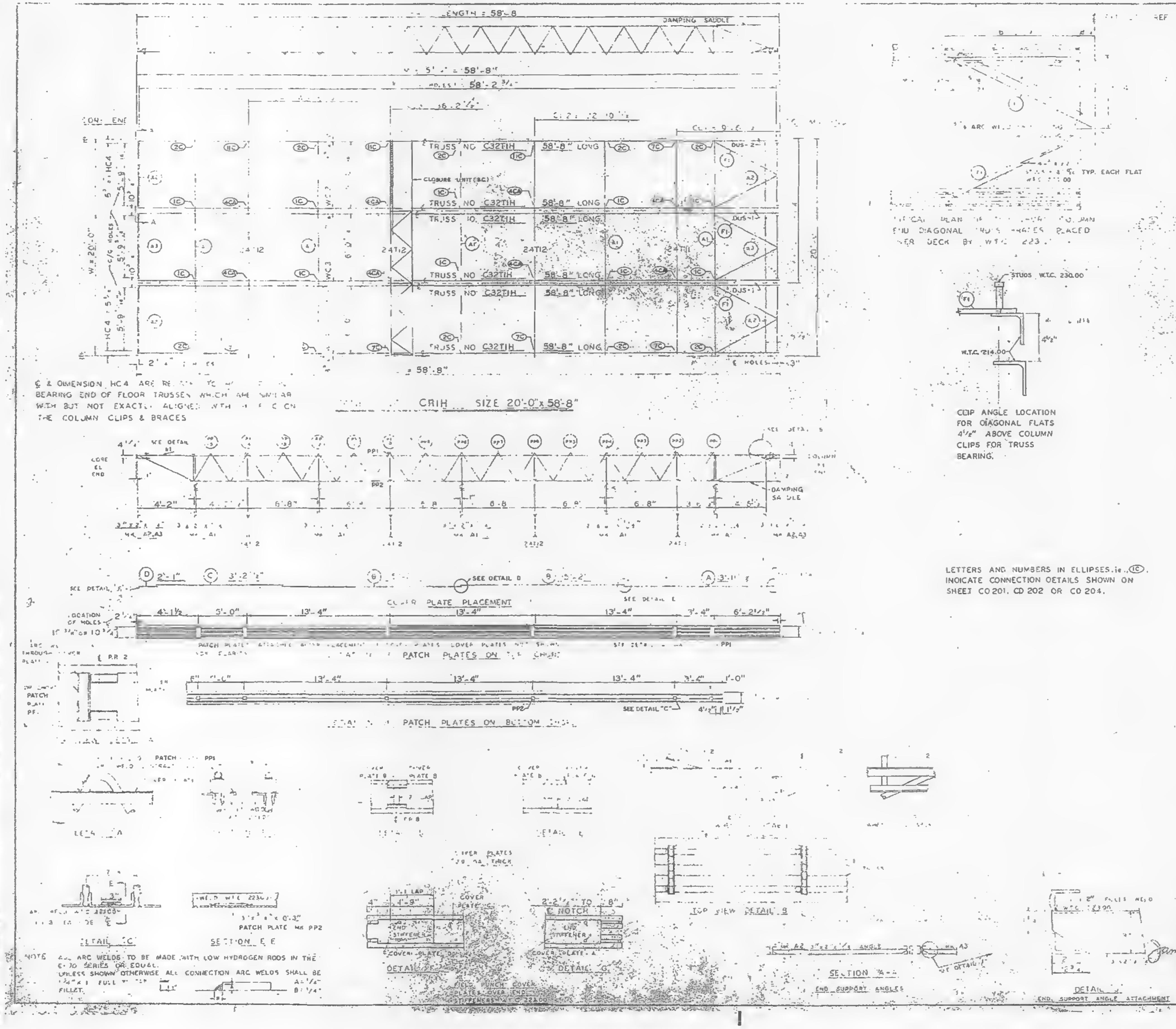
BLDG. A FLOORS 79-80 (N)

PANEL CRIH 58'-8"

BLDG. B FLOORS 79-80 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

| | |
|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-AB3-8 PLATE |
| APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 1/2/70 | DRAWN BY DATE OCT 23 1968 |
| APPROVED FOR FABRICATION BY FOR FABRICATOR DATE | CHECKED BY T.M. CHURA IN CHARGE DATE OCT 23 1968 |
| DETAILED BY | FABRICATION CONT. NO. 221 SHEET CRIH |



℄ & DIMENSION HC4 ARE RE[illegible] TO [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH [illegible] ON THE COLUMN CLIPS & BRACES

[illegible] PLAN [illegible] COLUMN END DIAGONAL TRUSS BRACES PLACED [illegible] DECK BY W.T.C. 223.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x 1 FULL [illegible] FILLET. A = ¼" B = ¼"

LETTERS AND NUMBERS IN ELLIPSES, i.e., Ⓘ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

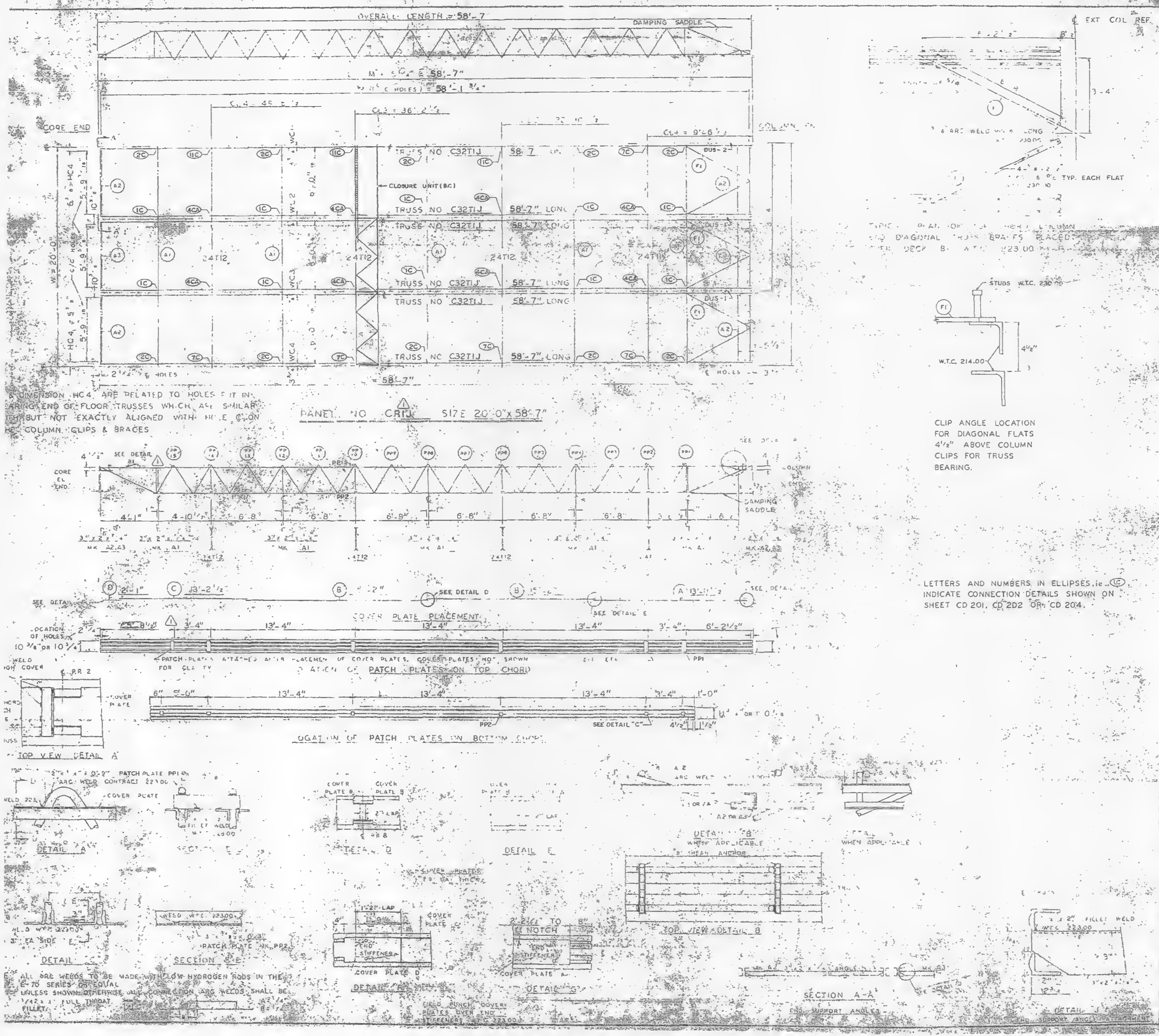
| REQUIRED MATERIAL [illegible] PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PC | SIZE | |
| FLOOR TRUSSES | 1H | [illegible] | [illegible]1H 58'-8" | ST201H |
| [illegible] TRUSSES | T[illegible] | 1 | 24" [illegible] | BT2[illegible] |
| | T12 | 3 | 24" [illegible] 19'-11" | BT212 |
| 3 x 2 x ¼ ANGLE | A1 | 5 | 3 x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3 x 2" x ¼" x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | [illegible] x 6'-5" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 21 | 2" x 1½" x ⅛" x 0'-2⅞" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS1 | 2 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 258 |
| | DUS2 | 1 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 258 |
| CONNECTION BAR | CB1 | 4 | 1" [illegible] x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | 2-[illegible] 1½" x 1¼" x | BT 212 |
| | | | 230 x 6'-6½" | CD204 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 0'-6½" | ST 400 |
| | P2 | 4 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

[illegible] 7-3-68
[illegible] 7-22-68
[illegible] 7-22-68
[illegible] 10-11-68
[illegible] 7-3-68
[illegible] 7-22-68
[illegible] 7-22-68
[illegible] 10-22-68

79-80 (1H) — (N) Please correct on original
PANEL CRIH 20'-0" x 58'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7483-8 7-22-68 PLATE
APPROVED FOR FABRICATION BY James [illegible] FOR [illegible] DATE 11/1/68
DRAWN BY [illegible] DATE OCT 23, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE OCT 23, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]
FABRICATION CONT. NO. WTC 221
SHEET NO. [illegible] CRIH



DIMENSION HC4 ARE RELATED TO HOLES FIT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

TYPICAL PLAN FOR COLUMN END DIAGONAL TRUSS BRACES PLACED AFTER DECK

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | TAJ | 6 | C32T1J - 58'-7" | ST 201 |
| | | | - | |
| | | | | |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11" | BT 211 |
| | T12 | 3 | 24T12 x 19'-11" | BT 212 |
| 3"x2"x1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x 18'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x 5/8" x 5'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 5/8" x 0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 13'-2" | ST 302 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 302 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 21 | 2"x1 1/2"x 1/4"x 0'-5" | ST 400 |
| | | | | |
| SHEAR ANCHOR | SA3 | 9 | 8 REBAR x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x3 1/2"x 3/8"x3'-8 7/8" | ST 215 |
| | DUS-2 | 1 | 3 1/2"x3 1/2"x 3/8"x3'-6 7/8" | ST 215 |
| CONNECTION BAR | CB1 | 4 | 1 3/8" x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2"x1 1/2"x 1/4"x | BT 212 |
| | | | 230' x 8'-6 1/2" | C 023 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| ⚠1 | 6-9-69 | AS NOTED | G.D.C. |

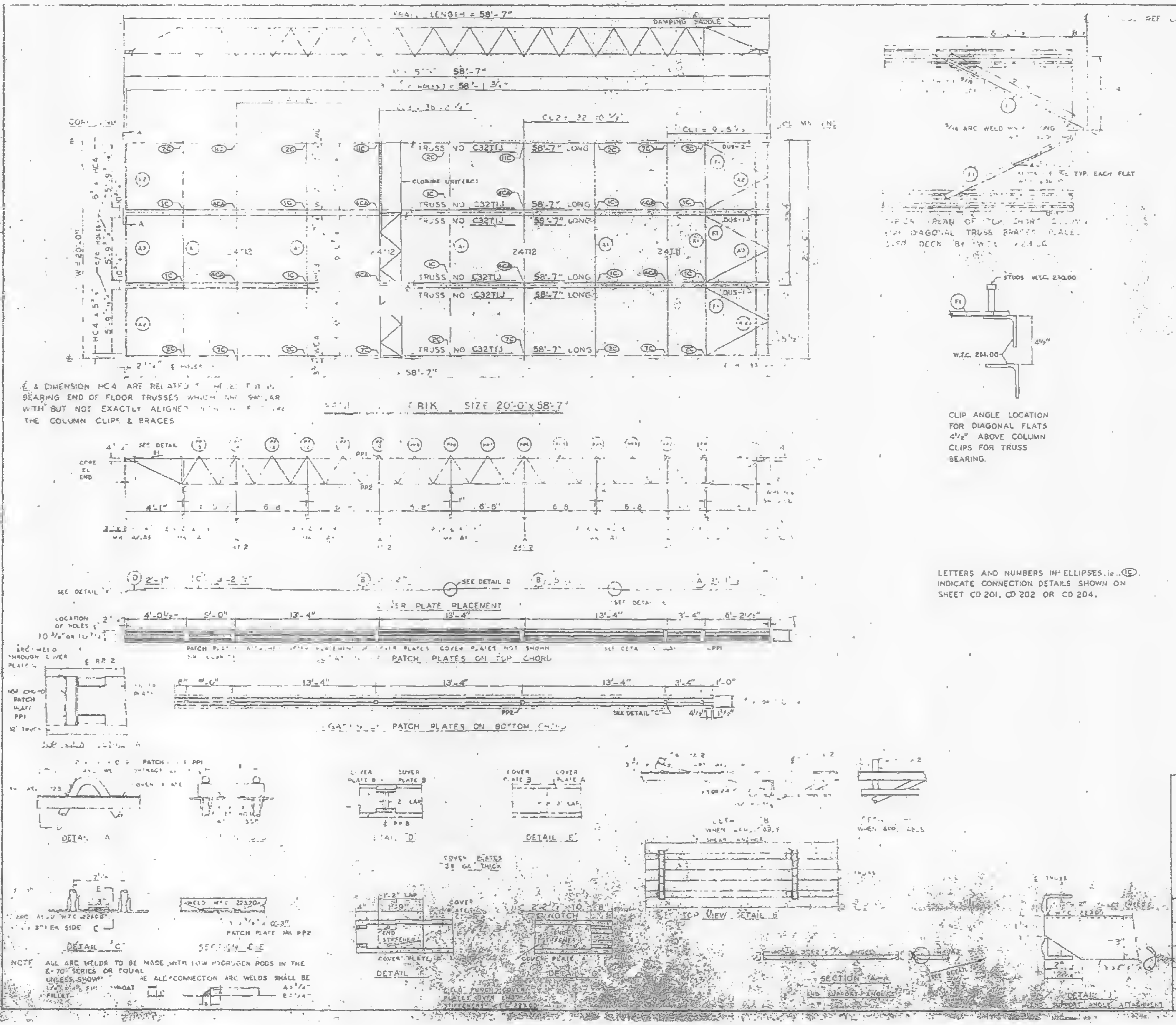
⚠1 REF DRWG

| | |
|---|---|
| 7-AB4-3 | 10-15-69 |
| 7-AB4-15,16 & 39 | 7-22-68 |
| 7-AB4-41 | 7-22-68 |
| 5X-124 | 69 |
| 7-AB3-2 | 1-3-68 |
| 7-AB1-2 | 7-22-69 |
| 7-AB2-6 & 7 | 7-22-69 |
| 7-AB4-42 | 10-15-68 |

FLOOR PANEL DETAILS
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 40 (N)
PANEL CR1J - 20' x 58'-7"
BLDG. B FLOORS 40 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 11/2/70
DRAWN BY DATE OCT 23 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR
CHECKED BY T.M. CHORA DATE OCT 23
DETAILED BY
FABRICATION



€ & DIMENSION HC4 ARE RELATED TO ... BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED ... THE COLUMN CLIPS & BRACES

PLAN OF TOP CHORD ... DIAGONAL TRUSS BRACES ... DECK BY ...

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN ... ALL CONNECTION ARC WELDS SHALL BE 1/4" ... FILLET.
A = 1/4"
B = 1/4"

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T1J | 6 | C32T1J - 58'-7" | ST201J |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T1 | 1 | 24T11 - 19' ... | ST211 |
| | T12 | 3 | 24T12 - 19'-11" | ST212 |
| ANGLE | A1 | 5 | 3" x 2" x 1/4" x 18'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-4 9/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-6 1/4" | ST 403 |
| DIAGONAL FLATS | F1 | 3 | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 2 | [illegible] | ST 400 |
| | | | | |
| COVER PLATES | A | 3 | [illegible] | ST 305 |
| | B | 6 | [illegible] | ST 305 |
| | C | 3 | [illegible] | ST 305 |
| | D | 6 | [illegible] | ST 305 |
| ANGLE CLIPS | L | 2 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 ... x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS 1 | 2 | ... x 3/8" x 3'-6 3/4" | ST 295 |
| | DUS 2 | 1 | ... x 3 1/2" x 3/8" x 3'-6" | ST 293 |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2 ... 1 1/2" x 1 1/4" x | ST 212 |
| | | | 230 x 6' 6 1/2" | CD 204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .30" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .30" x 1'-0" | ST 400 |

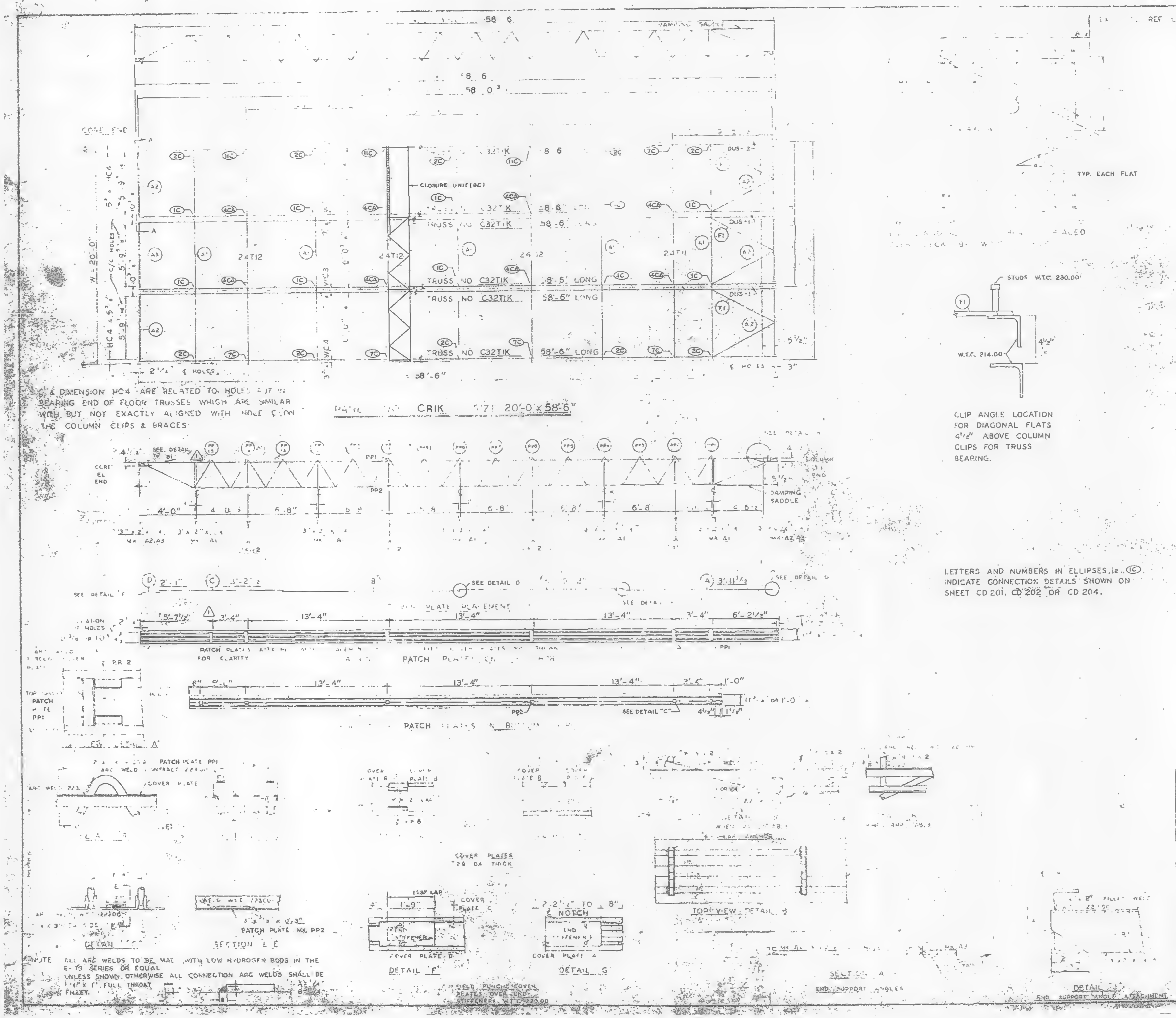
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

REF. DWGS.
... AB4 ... 31 1-3-68
AB4 15,16 & 39 7-22-68
AB4 41 7-22-68
SA ... 10-11-68
AB3 ... 1-3-68
42 ... 7-22-68
... 7 7-22-68
AB4-42 10-22-68

STEEL DETAILS
FOR
... WITH ...
FOR
THE PORT OF NEW YORK AUTHORITY

B... 40 (N)
PANEL GRID 20'-0" x 58'-7"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN, DRAWING NO. 7-AB3-6 7-22-68 PLATE
APPROVED FOR FABRICATION James White FOR PONYA DATE 11/1/68
DRAWN BY ... DATE OCT 23, 1968
APPROVED FOR FABRICATION BY ___ FOR FABRICATOR DATE
CHECKED BY T.M.CHORA DATE OCT 23, 1968
DETAILED BY LACLEDE ... WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP GRID



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. CRIK SIZE 20'-0" x 58'-6"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie.. ⓘC, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | [illegible] | | [illegible] | |
| [illegible] | K | 6 | C32TIK - 58-6 | [illegible] |
| | | | | |
| | | | | |
| [illegible] | T | 1 | 24" [illegible] | [illegible] |
| | T12 | 3 | 24T12 - 19'-1" | BT 212 |
| [illegible] ANGLE | A1 | 8 | 3"x2"x1/4"x9'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x5'-11 9/16" | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x5-1 3/4" | ST 403 |
| DIAGONAL [illegible] | F1 | 6 | 1 1/2"x 3/8" x 5-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 403 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9"x.0135"x13'-11 1/2" | ST303 |
| | B | 6 | 9"x.0135"x 15'-2 1/2" | [illegible] |
| | C | 3 | 9"x.0135"x13'-2 7/8" | [illegible] |
| | D | 3 | 9"x.0135" x [illegible] | ST303 |
| ANGLE CLIPS | C1 | 21 | [illegible] 0'-6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x3 1/2"x3/8"x3'-6 7/8" | ST 288 |
| | DUS-2 | 1 | 3 1/2"x3 1/2"x3/8"x3'-6 7/8" | ST 288 |
| CONNECTION BAR | CB1 | 4 | 1" x 6'-2" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2 - 1 1/2"x 1 1/4" x .230 x 6'-6 1/2" | ST 212<br>CD 204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 401 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .30" x 1'-0" | ST 400 |

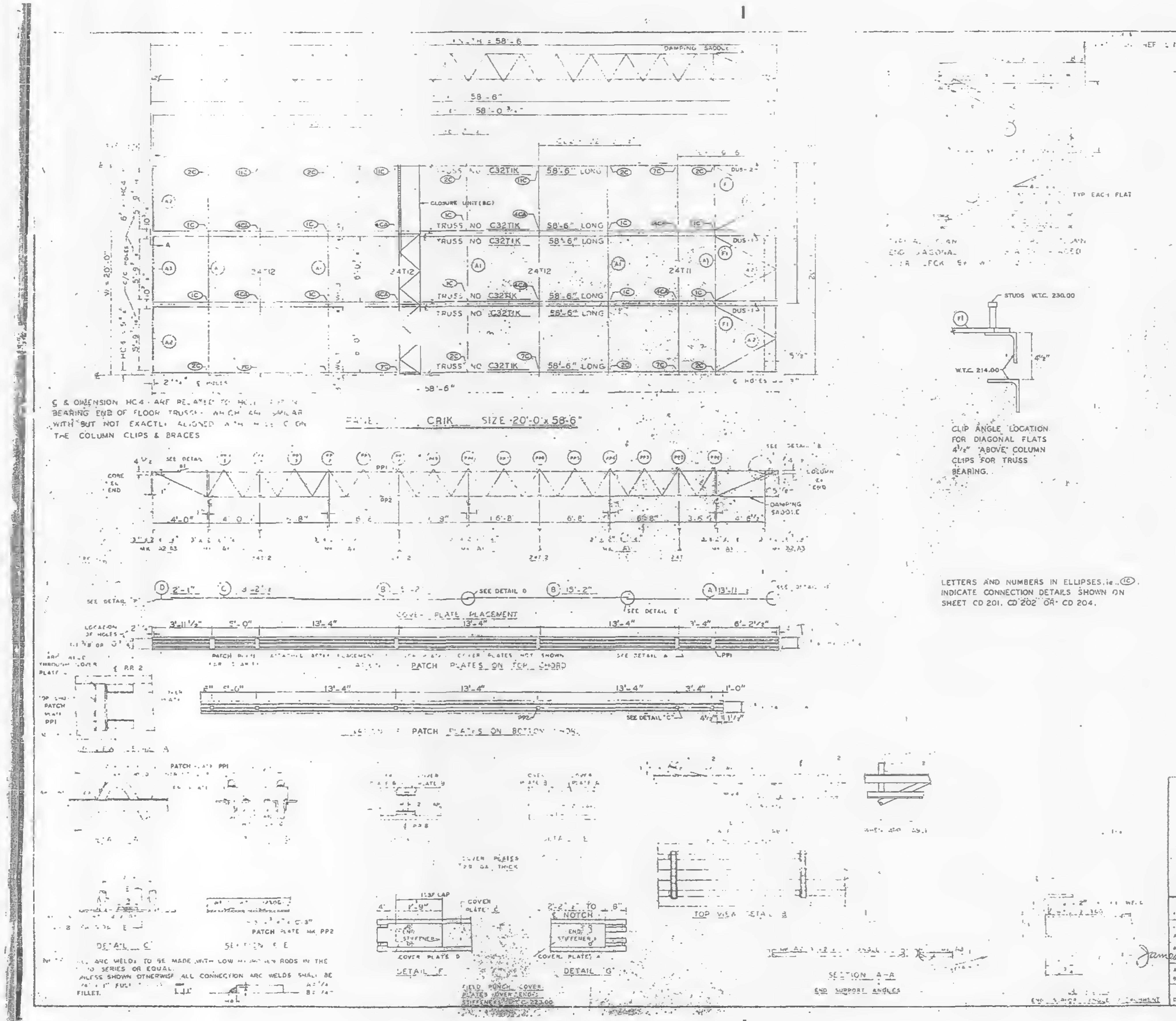
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| ⚠1 | 6-9-69 | AS NOTED | G.J. |

⚠1 REF. DWGS
[illegible] AB4 3 — 10-15-68
[illegible] AB4 15,16 & 39 — 7-22-68
[illegible] AB4 41 — 7-22-68
[illegible] — [illegible]-69
[illegible] AB3 2 — [illegible] 3-68
[illegible] 2 — 7-22-68
[illegible] AB[illegible] 6 & 7 — 7-22-68
7-AB4 42 — 10-[illegible]-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. [illegible] 45-46 (S) 46 (N)
PANEL CRIK — 58'-6"
BLDG. B FLOORS 45 (EAST) 46 (EAST & WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING [illegible]
7-AB4-B [illegible]
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.
DATE 1/2/70
DRAWN BY [illegible]
DATE OCT 23 [illegible]
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE
CHECKED BY T.M.C.P.J.
DATE OCT 23
IN CHARGE OF [illegible]
DETAILED [illegible]



℄ & DIMENSION HC4 ARE RELATED TO HOLE [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH [illegible] ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" "ABOVE" COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. ⑦C, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTES: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL [illegible] FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIA | [illegible] | | S | |
| FLOOR TRUSS | K | | [illegible]K 58'-6 | ST20IK |
| [illegible] | | | 4' 9 | |
| | T12 | 3 | 24T[illegible] 19'-1" | BT212 |
| ANGLE | A1 | 5 | 3 x 2 x 1/4 x 19'-1" | ST 403 |
| | A2 | 4 | 3 x 2 x 1/4 x 5'-11 5/8 | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 5 | [illegible] x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x .4" x 0'-8 | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9"x 0135 x 13'-11 1/2" | ST303 |
| | B | 6 | 9"x 0135"x 15'-2" | ST303 |
| | C | 3 | 9"x .0135"x 13'-2 1/2" | ST303 |
| | D | 3 | 9"x 0135"x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 21 | 2"x 1 1/2"x 1/4"x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST298 |
| | DUS-2 | 1 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST298 |
| CONNECTION BAR | CB1 | 4 | 1" x 1'-3" | ST 400 |
| CLOSURE UNIT | BC | 3 | 2-4x 1 1/2"x 1 1/4"x<br>.230 x 6'-6 1/2" | BT212<br>CD204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-8 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |

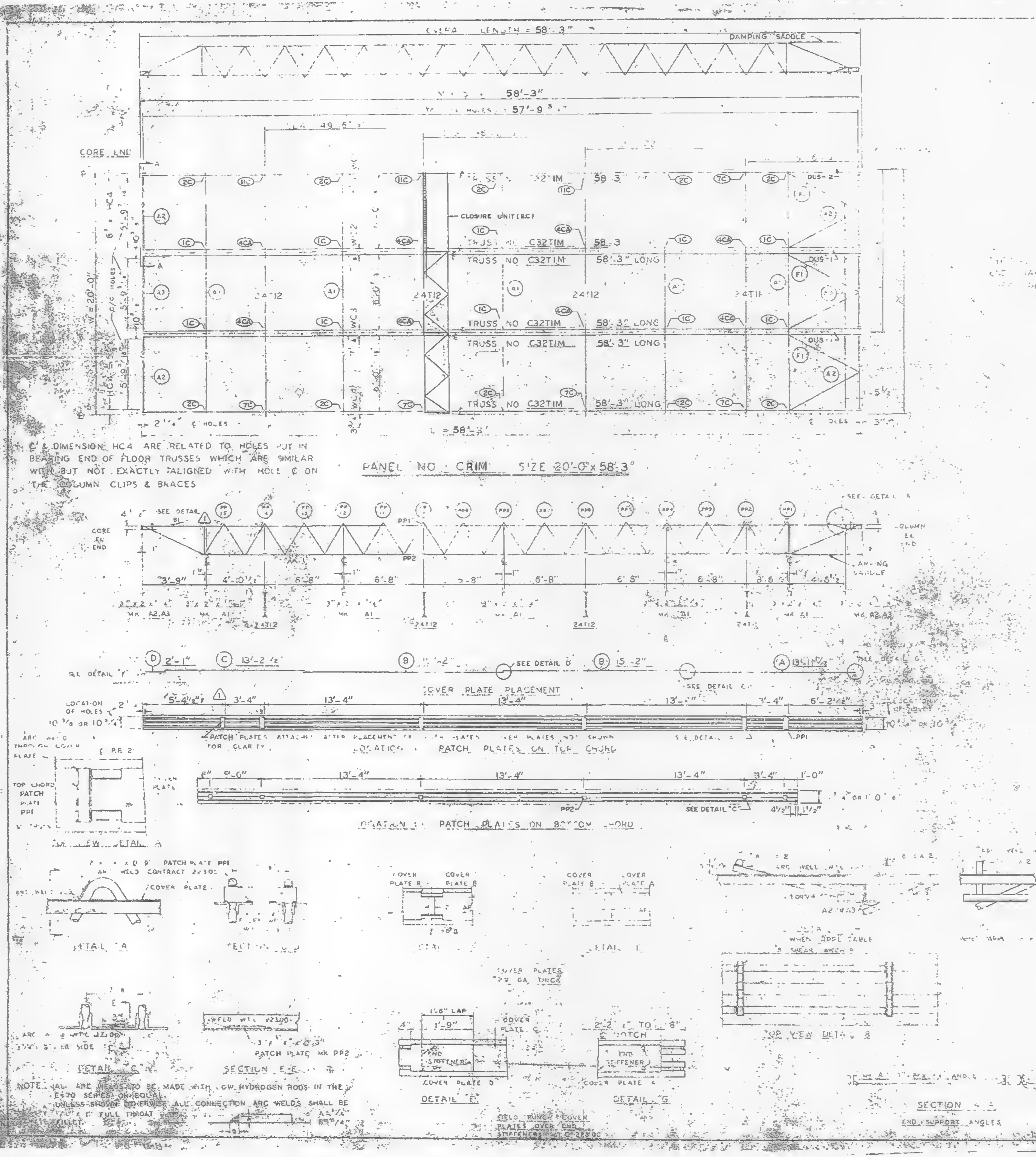
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

| | | |
|---|---|---|
| | 684 33 | |
| | 684 15,16 & 39 | 7-22-68 |
| | 684 41 | 7-22-68 |
| | | 10-11-68 |
| | | |
| | | 7-22-68 |
| | | 7-22-68 |
| | 684 42 | 10-22-68 |

45-46 (S) 46(N)

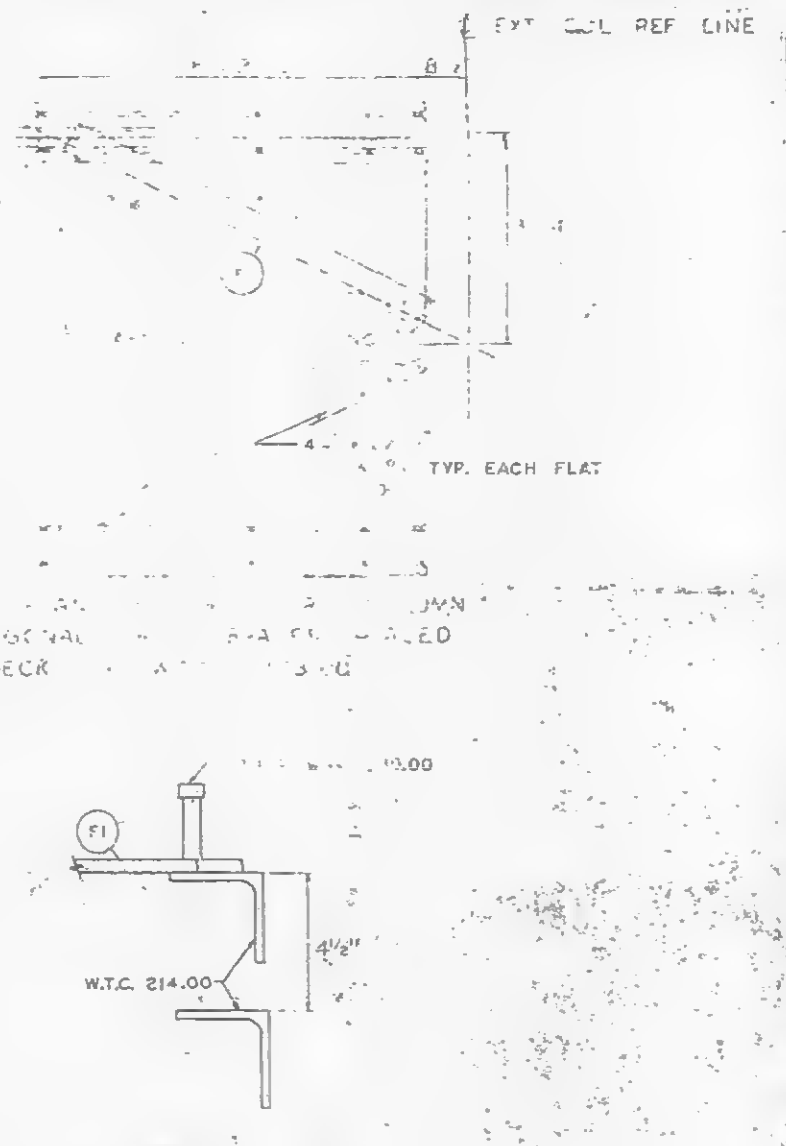
PANEL CRIK 20'-0" x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 493 B 7-22-68 PLATE
APPROVED FOR FABRICATION James White FOR [illegible] DATE 11/1/68
DRAWN BY [illegible] DATE OCT 23, 1968
APPROVED FOR FABRICATION FOR FABRICATOR DATE
CHECKED BY T.M.CHU DATE OCT 23, 1968
IN CHARGE OF PROD. DEV.
DETAILED [illegible] WEBER
FABRICATION CONT NO. #T.C 221
SHEET NO. FP-CRIK



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



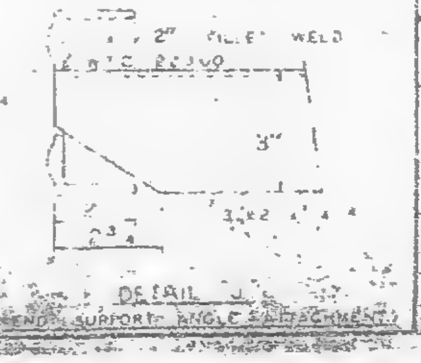
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | TIM | 6 | C32TIM - 58'-3" | ST201M |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | 11 | 1 | 24T11 - 19'-11" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| 3"x2"x1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x5'-11 9/16" | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x3/8"x6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x1/4"x0'-9" | ST 400 |
| | PP2 | 18 | 3"x1/4"x0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9"x 0135"x 3'-11 1/2" | ST303 |
| | B | 6 | 9"x 0135"x 15'-2" | ST303 |
| | C | 3 | 9"x 0135"x 13'-2 1/2" | ST303 |
| | D | 3 | 9"x 0135"x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 21 | 2"x1 1/2"x1/4"x0'-6" | ST 400 |
| | | | | |
| SHEAR ANCHOR | SA2 | 9 | #3 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS1 | 2 | 3 1/2"x3 1/2"x3/8"x3'-8 7/8" | ST219 |
| | DUS-2 | 1 | 3 1/2"x3 1/2"x3/8"x3'-8 7/8" | ST229 |
| CONNECTION BAR | CB1 | 4 | 1"⌀x 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 24x1 1/2x1 1/4x<br>.230 x 5'-6 1/2" | BT212<br>CD204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2"x3/8"x0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2"x.39"x0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x.39"x1'-0" | ST 400 |

LETTERS AND NUMBERS IN ELLIPSES ie. ⓘⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-9-69 | AS NOTED | G.D. |

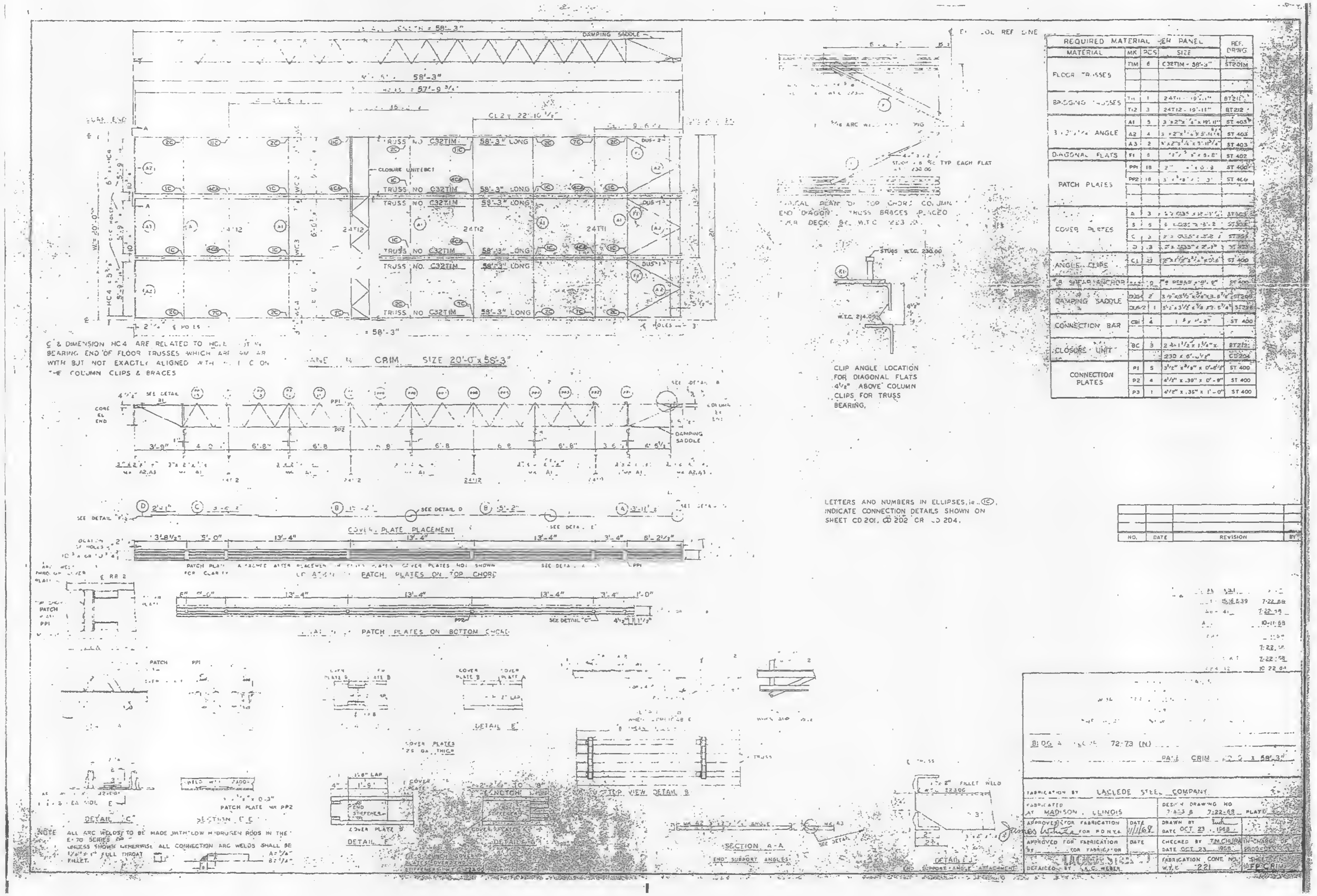
⚠1 REF. DRWG.
AB4-3 10-15-68
AB4-15,16 & 39 7-22-68
AB4-41 7-22-68
SA 12-4 1-6-69
AB3-2 1-3-68
AB1-2 7-22-68
AB2-6 & 7 7-22-68
AB4-42 10-15-68



FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL CRIM 20'-0" x 58'-3"
BLDG. B FLOORS 72-73 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-8 PLATE
APPROVED FOR FABRICATION BY [illegible] N.Y.C. DATE 7/2/68
DRAWN BY [illegible] DATE OCT. 23, 1968
APPROVED FOR FABRICATION BY [illegible] DATE
CHECKED BY T.M. CHOR DATE OCT. 23, 1968 IN CHARGE OF PRODUCTION
DETAILED BY [illegible]
FABRICATION CONT. W.T.C. CRIM



⊈ & DIMENSION HC4 ARE RELATED TO HOLE [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE [illegible] WITH BUT NOT EXACTLY ALIGNED WITH [illegible] ON THE COLUMN CLIPS & BRACES

TYPICAL BEAM OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED [illegible] DECK [illegible] W.T.C. 223 [illegible]

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES [illegible]
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 5/16"
B = 1/4"

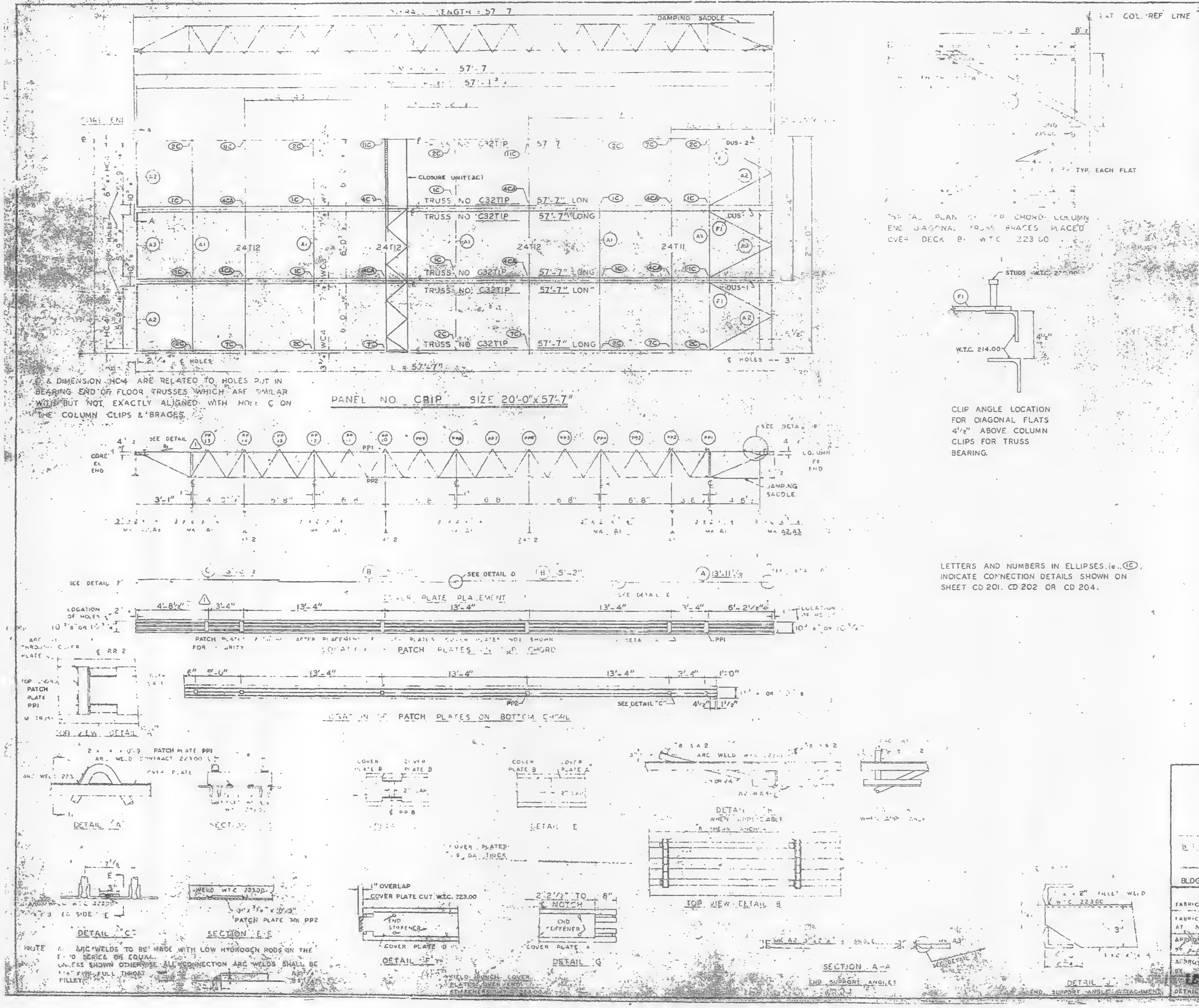
| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | TIM | 6 | C32TIM - 58'-3" | ST201M |
| BRIDGING TRUSSES | T11 | 1 | 24T11 - 19'-11" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| 3 x 2" x 1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x[illegible] | ST 403 |
| | A3 | 2 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] | ST 400 |
| COVER PLATES | A | 3 | [illegible] | ST 303 |
| | B | 5 | [illegible] | ST 303 |
| | C | 3 | [illegible] | ST 303 |
| | D | 3 | [illegible] | ST 303 |
| ANGLE CLIPS | C1 | 23 | [illegible] | ST 400 |
| [illegible] | [illegible] | 9 | [illegible] | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x3 1/2"x3/8"x3'-5 7/8" | ST 208 |
| | DUS-2 | 1 | 3 1/2"x3 1/2"x3/8"x2'-5 3/4" | ST 208 |
| CONNECTION BAR | CB1 | 4 | [illegible] | ST 400 |
| CLOSURE UNIT | BC | 3 | 2 4x1 1/2"x 1 1/4"x<br>230 x 6'-1/2" | BT212<br>CD204 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .35" x 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

15,16 & 39 7-22-68
7-22-68
10-11-68
7-22-68
7-22-68
10-22-68

BLDG A [illegible] 72-73 (N)
PANEL CRIM 20'-0" x 58'-3"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A23 B 7-22-68 PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A. DATE 11/1/68
DRAWN BY [illegible] DATE OCT. 23, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M.CHURA DATE OCT. 23, 1968
IN CHARGE OF PROJECT
LACLEDE STEEL
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP CRIM



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⓒ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | TIP | 6 | C32TIP - 57'-7" | ST201P |
| | | | | |
| | | | | |
| | T11 | 1 | 24T11 - 19'-11" | BT211 |
| | T12 | 3 | 24T12 - 19'-11" | BT212 |
| ANGLE | A1 | 5 | 3"x2"x¼"x19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x¼"x5'-11⅝" | ST 403 |
| | A3 | 2 | 3"x2"x¼"x5'-11¾" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½"x⅝"x6'-6" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x¼"x0'-9" | ST 400 |
| | PP2 | 18 | 3"x⅜"x0'-3" | ST 400 |
| | | | | |
| | | | | |
| COVER PLATES | A | 3 | 9"x.0135"x13'-11½" | ST 303 |
| | B | 6 | 9"x.0135"x15'-2" | ST 303 |
| | C | 3 | 9"x.0135"x13'-2½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 21 | [illegible] | ST 400 |
| | | | | |
| SHEAR ANCHOR | SA | [illegible] | [illegible] | [illegible] |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x3½"x¼"x[illegible] | ST 2[illegible] |
| | DUS-2 | 1 | 3½"x3½"x¼"x3'-8⅞" | ST 2[illegible] |
| CONNECTION BAR | CB1 | [illegible] | 1"x[illegible]-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2"x1½"x1¼"x | ST 212 |
| | | | .230 x 6'-6½" | CD 201 |
| CONNECTION PLATES | P1 | 5 | 3½"x⅜"x0'-5½" | ST 400 |
| | P2 | 4 | 4½"x.39"x0'-9" | ST 400 |
| | P3 | 1 | 4½"x.39"x1'-0" | ST 400 |

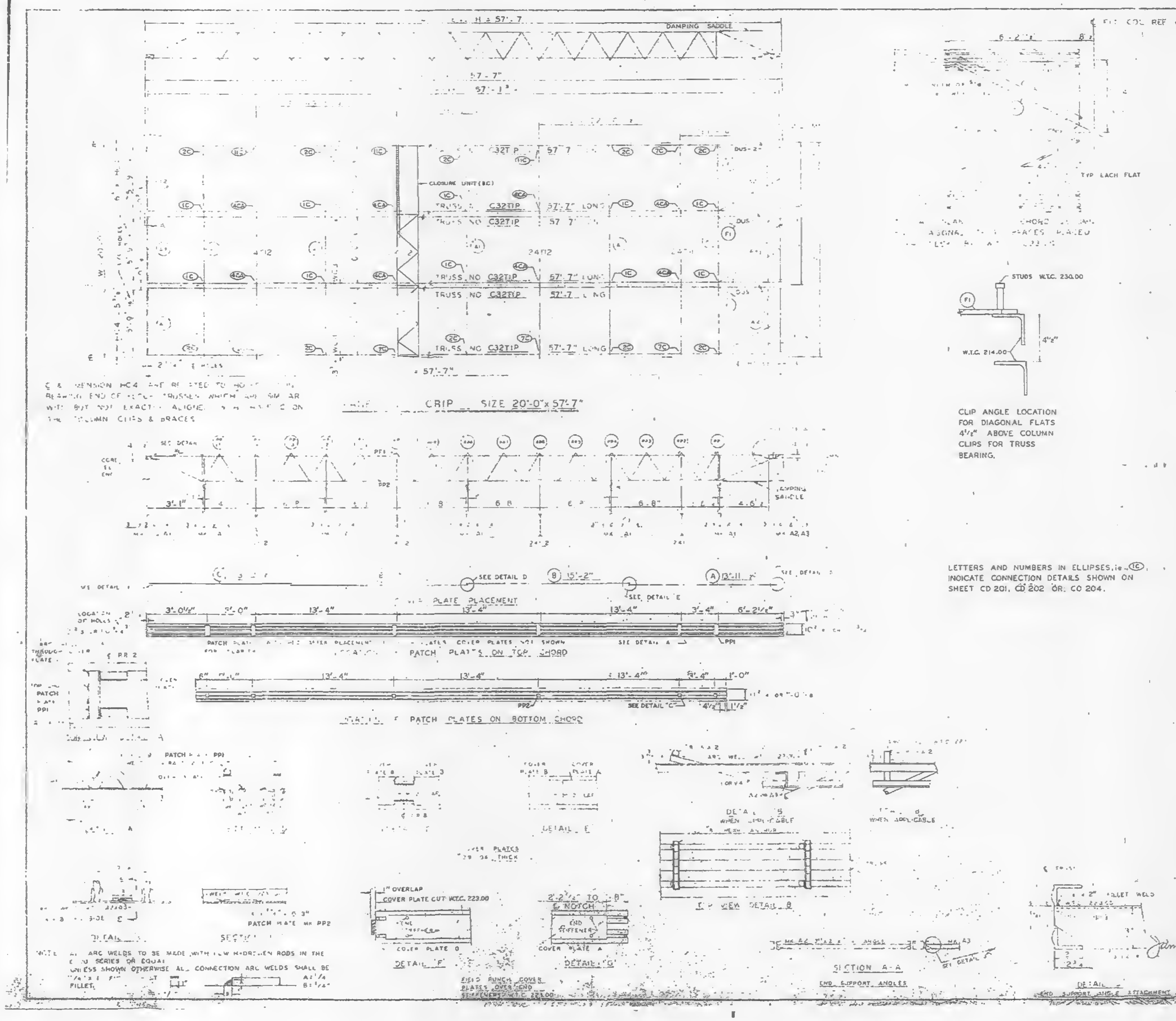
| | | |
|---|---|---|
| ⚠1 | 6-9-69 | AS NOTED |
| NO. | DATE | REVISION |

⚠1 REF DRWG

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

B [illegible] 74 (N)
PANEL CRIP 57'-7"
BLDG. B FLOORS 74 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB5-8
APPROVED FOR FABRICATION DATE 1/2/70
DRAWN BY DATE OCT 23, 1968
APPROVED FOR FABRICATION DATE
CHECKED BY T.M.CHURA
DATE OCT 23
DETAILED BY



℄ & DIMENSION HC4 ARE RELATED TO ... BEARING END OF ... TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED ... ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘ1C, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E[illegible] SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FILLET.
A: ¼
B: ¼"

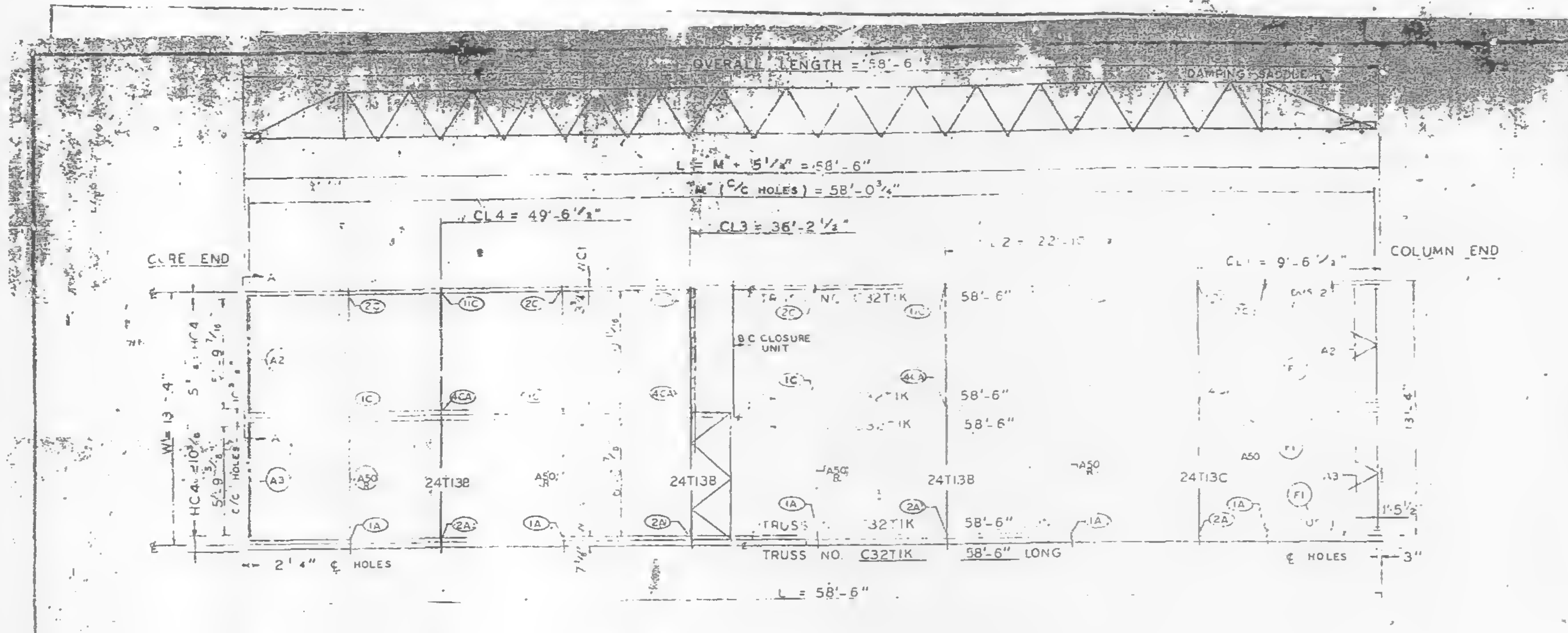
| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | TP | [illegible] | 32TIP × 57'-7 | ST 201P |
| | | | | |
| | | | | |
| [illegible] TRUSSES | [illegible] | | 24[illegible] 19 [illegible] | B[illegible] |
| | T12 | 3 | 24T12 × 19'-[illegible] | BT 212 |
| [illegible] ANGLE | A1 | 5 | [illegible] | ST 403 |
| | A2 | 4 | 3 × 2 × [illegible] × 5'-[illegible] | ST 403 |
| | A3 | 2 | [illegible] × 5'-[illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 18 | [illegible] | ST 400 |
| | PP2 | 18 | [illegible] × 3" | ST 400 |
| | | | | |
| COVER PLATES | A | 3 | 9 × 0.35 × 13'-[illegible] | ST 303 |
| | B | 6 | 9 × 0.35" × 15'-2" | ST 303 |
| | C | 3 | 9 × 0.35" × 13'-2½ | ST 303 |
| | | | | |
| ANGLE CLIPS | | 21 | 2" × 1½ × ¼" × 0'-6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR × 0'-9" | ST 400 |
| DAMPING SADDLE | DUS4 | 2 | 3½" × 3½" × ⅜" × 3'-6⅞" | ST 298 |
| | DUS[illegible] | [illegible] | 3 × [illegible] × 3'-5⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" × 1'-3" | ST 400 |
| | | | | |
| CLOSURE UNIT | BC | 3 | 2 × [illegible] 1½" × 1¼" × | BT 212 |
| | | | 230 × 6'-6½" | CD 204 |
| CONNECTION PLATES | P1 | 5 | 3½" × ⅜" × 0'-6½" | ST 400 |
| | P2 | 4 | 4½" × .39" × 0'-9" | ST 400 |
| | P3 | 1 | 4½" × .39" × 1'-0" | ST 400 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

REF. DWG.
AB4-3,3,1 — 1-3-69
AB4-15,16 & 39 — 7-22-68
AB4-41 — 7-22-68
[illegible] 4 — 10-11-68
AB3 — 1-3-69
[illegible] — 7-22-68
[illegible] — 7-22-68
AB4-42 — 10-22-68

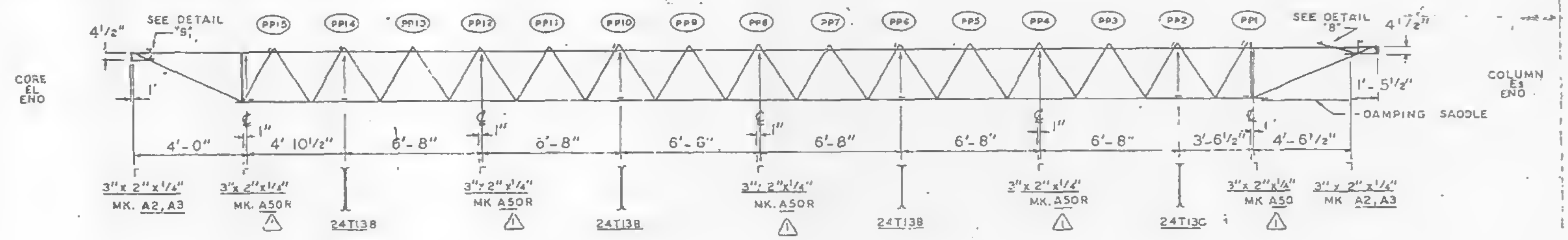
BLDG A FLOOR 74 (M)
CRIP 20'-0" × 57'-7"

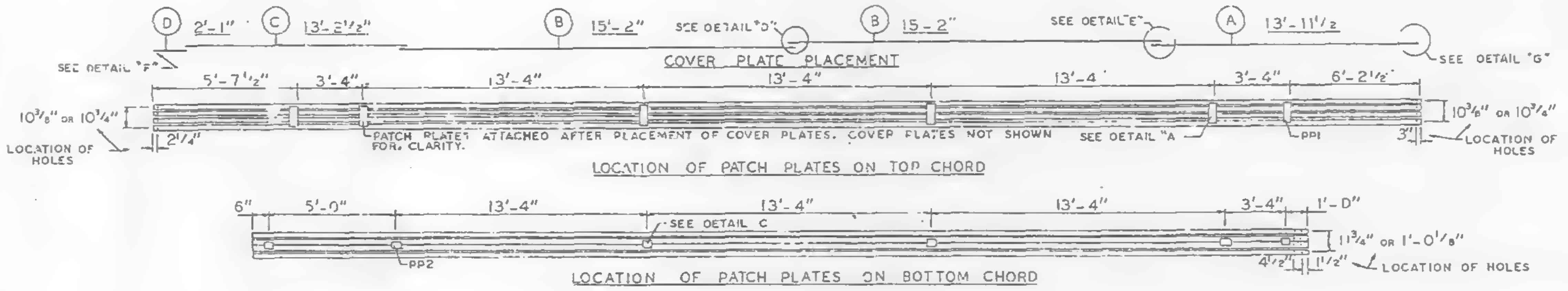
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO [illegible] B 7-22-68 PLATE
APPROVED FOR FABRICATION FOR [illegible] James White DATE 11/1/68
DRAWN BY [illegible] DATE OCT. 23, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.N. CHURA DATE OCT. 23, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY [illegible] WEBER
FABRICATION CONT. NO. [illegible] 221
SHEET FP CRIP

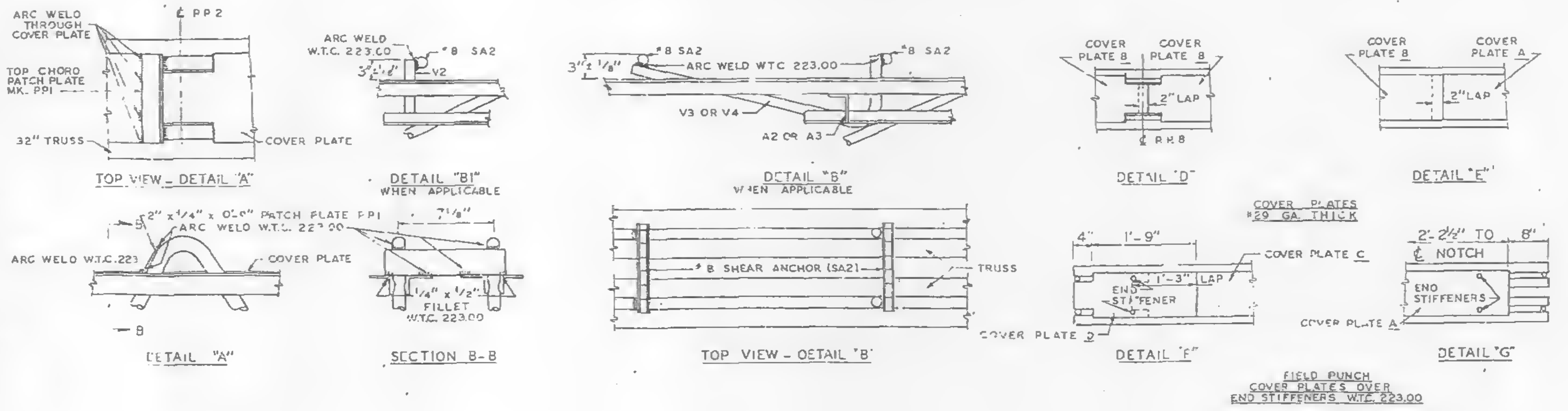


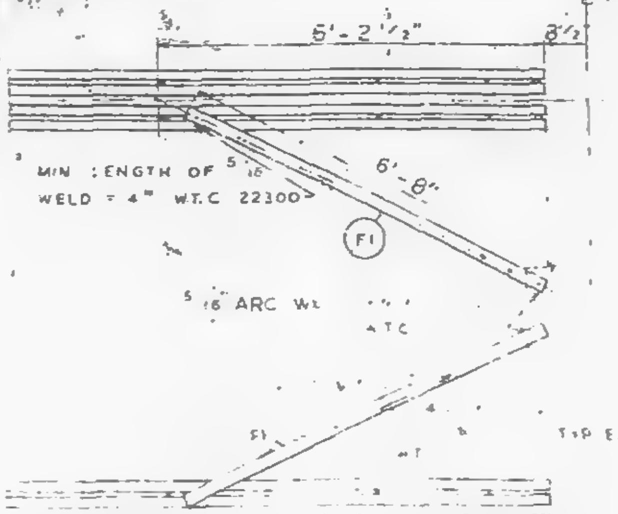
PANEL NO. CR7K SIZE 13'-4" x 58'-6"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

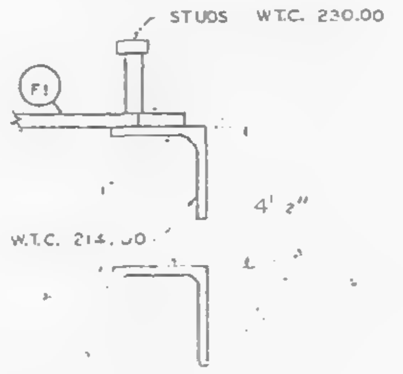






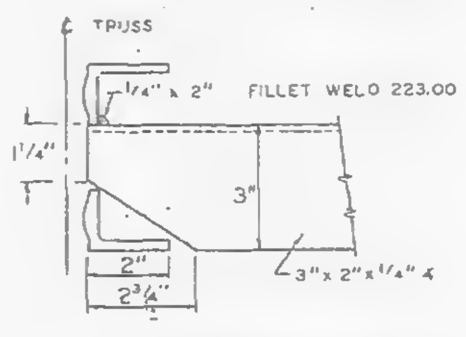


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACE PLACED OVER DECK BY W.T.C. 223.00



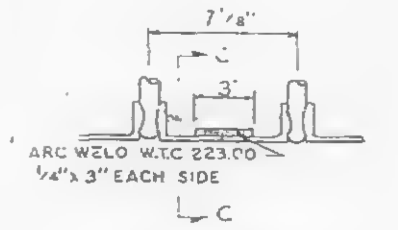
CLIP ANGLE LOCATION FOR DIAGONAL PLATE 4' 2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES i.e. ◯ INDICATE CONNECTION DETAILS SHOWN ON SHEET FD 201, CL 104 - CD 229.

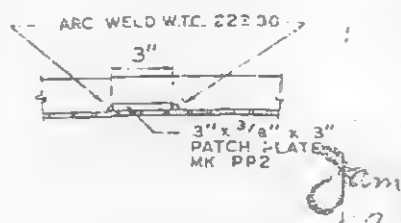


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

| REQUIRED MATERIAL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | [illegible] |
| FLOOR TRUSSES | [illegible] | [illegible] | [illegible] 58'-6" | [illegible] |
| [illegible] | [illegible] | [illegible] | 24T13B [illegible] | ST 213B |
| | [illegible] | [illegible] | 24T13C [illegible] | ST 213C |
| | A2<br>A50 | [illegible] | [illegible] | [illegible] |
| COVER PLATES | [illegible] | 6 | [illegible] | ST 303 |
| | [illegible] | 3 | [illegible] | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 13 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | [illegible] | 9 | [illegible] | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | [illegible] |
| | [illegible] | 1 | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | 4 | 1" ⌀ x 1'-3" | [illegible] |
| CONNECTION PLATES | [illegible] | 3 | [illegible] 5 1/2" | ST 400 |
| | P2 | 4 | [illegible] | ST 400 |
| | [illegible] | 1 | [illegible] | ST 400 |
| | P14 | 2 | [illegible] | ST 416 |
| [illegible] | BC | [illegible] | [illegible] | ST 213B |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

⚠ 4-25-69 AS NOTED GDC

| REF DRWG | |
|---|---|
| 7-AB4-15.1 | 10-4-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB3-80 | 10-15-68 |
| 7-AB1-24 | 1-6-69 |
| 7-AB2-8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

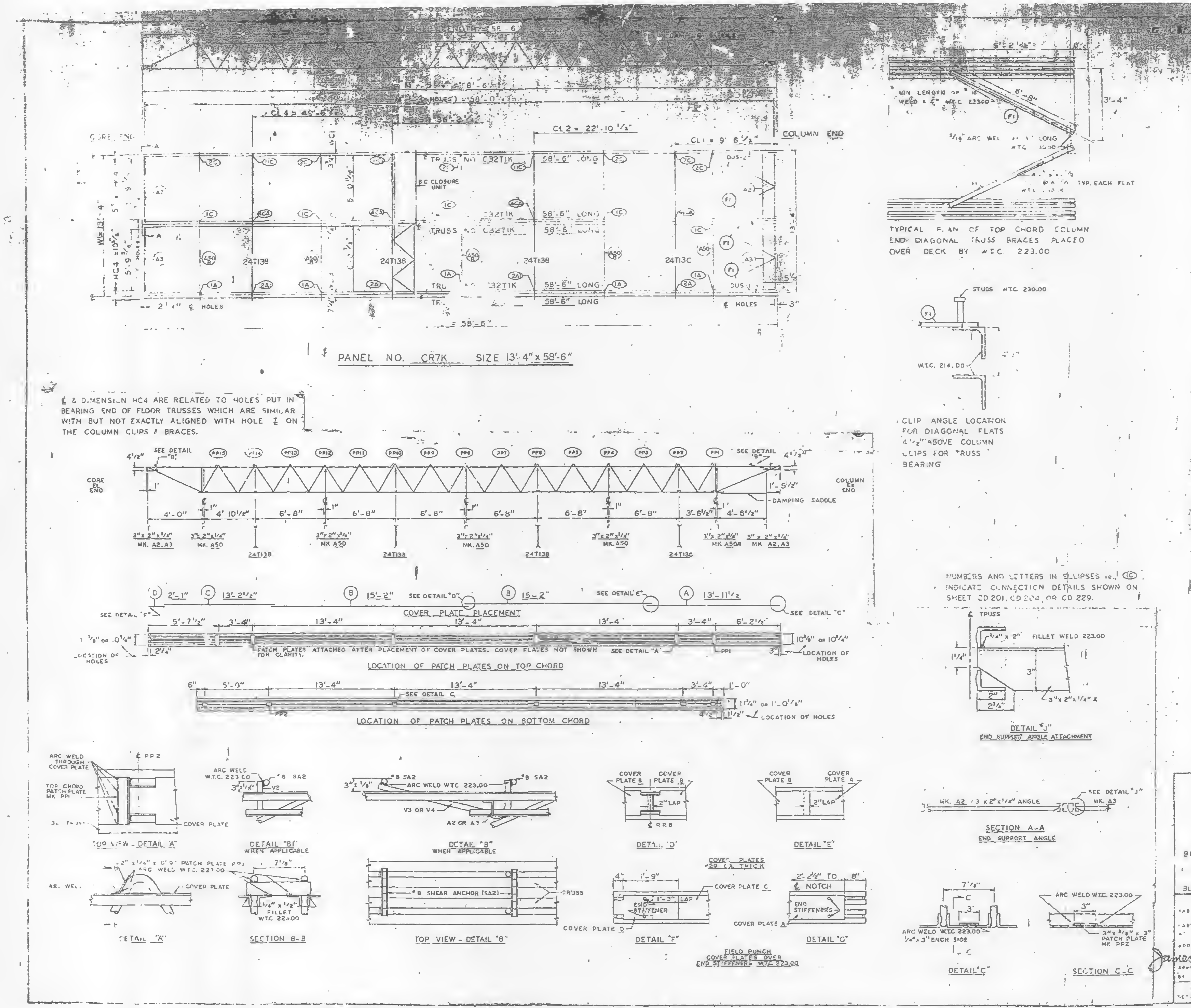
BLDG. A FLOORS 4[illegible]

PANEL CR7K - 13'-4" x 58'-6"

BLDG. B - 45 (WEST ONLY)

James White 6/12/69

T.M. CHURA
PROD. CHK
FP-CR7K



PANEL NO. CR7K SIZE 13'-4" x 58'-6"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES i.e. ⓒ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204, OR CD 229.

| MATERIAL | | | | |
|---|---|---|---|---|
| FLOOR TRUSSES | [illegible] | 5 | [illegible] 58'-6" | ST 20:K |
| BRIDGING TRUSSES | 13B | 3 | 24T13B - 14'-1½" | [illegible] |
| | T13C | 1 | 24T13C - 14'-1½" | BT2130 |
| 3"x2"x¼" ANGLE | A2 | 2 | 3"x2"x¼"x5'-11 9/16" | ST403 |
| | A3 | 2 | 3"x2"x¼"x5'-11 3/16" | ST403 |
| | A50<br>A50R | 4 | 3"x2"x¼"x14'-1¼" | ST403 |
| DIAGONAL FLATS | F1 | 4 | 2"x⅝" x 6'-8" | ST432 |
| PATCH PLATES | PP1 | 18 | [illegible] | [illegible] |
| | PP2 | 16 | [illegible] | [illegible] |
| COVER PLATES | A | 3 | [illegible] | [illegible] |
| | B | 6 | 9" x .0135" x 15'-2" | ST303 |
| | C | 3 | 9" x .0135" x 3'-2" | ST303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST303 |
| ANGLE CLIPS | C1 | 13 | 2"x1½"x¼"x0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | [illegible] | ST 400 |
| DAMPING SADDLE | DS-1 | 2 | [illegible] | ST298 |
| | DS-2 | 1 | [illegible] | ST298 |
| CONNECTION BAR | CB1 | 4 | 1"⌀ x 1'-3" | ST 420 |
| CONNECTION PLATES | P1 | 8 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 4 | 4½" x .30" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | P14 | 4 | 3"x½"x 0'-1" | ST 416 |
| CLOSURE UNIT | BC | 3 | 1¼" ⌀ 6'-6½" TUBE | BT 2138 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

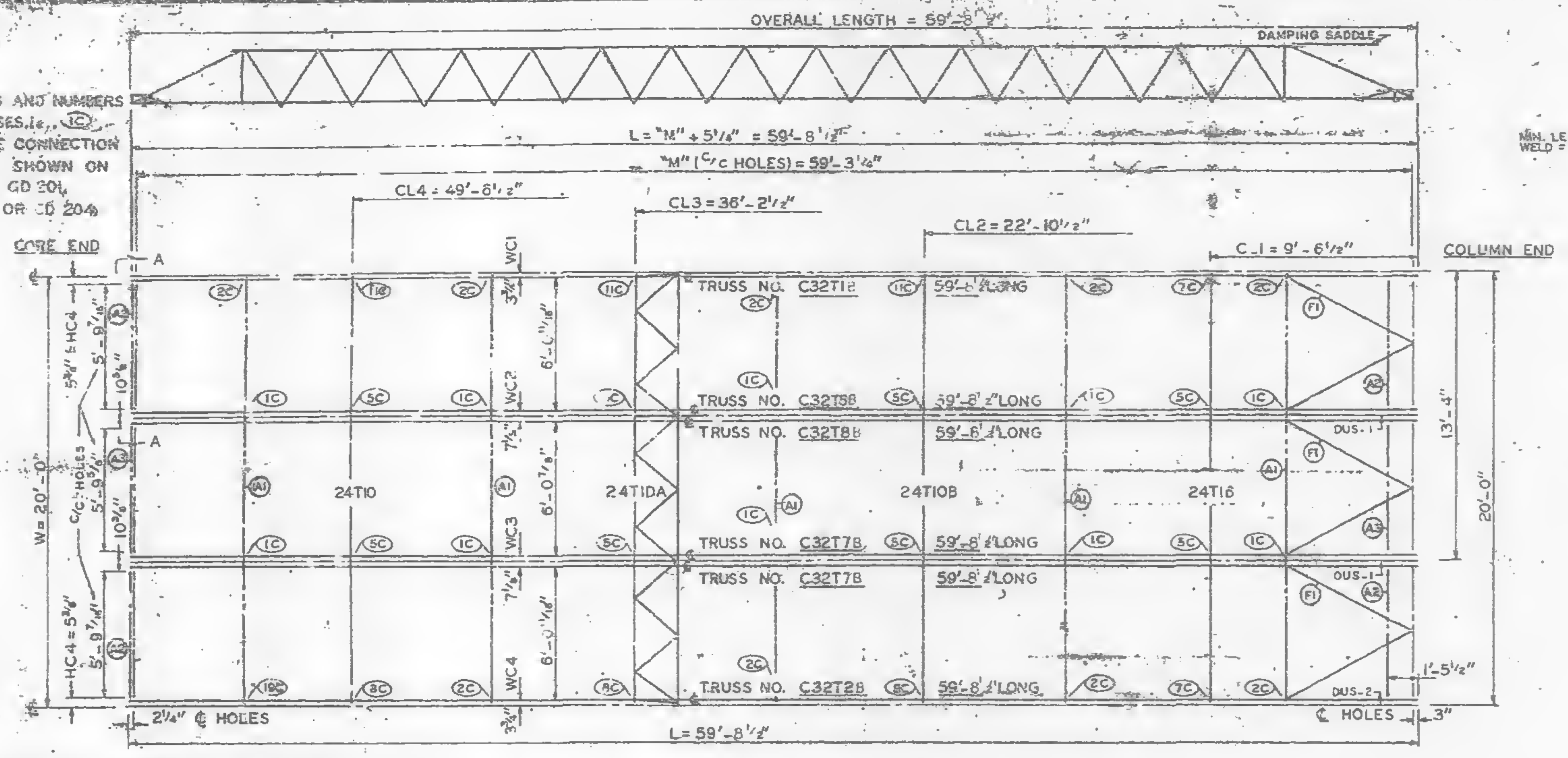
REF. DRWG

| | |
|---|---|
| 7-AB4-15-1 | 10-4-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB3-80 | 10-15-68 |
| 7-AB1-24 | 1-6-69 |
| 7-AB2-8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A, FLOORS 45 [illegible]
PANEL CR7K - 13'-4" x 58'-6"
BLDG. B - 45 (WEST ONLY)

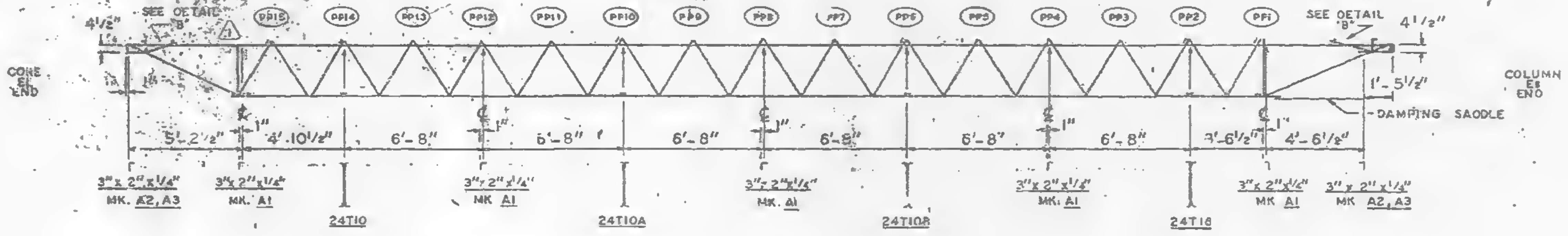
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR PONYA James White DATE 4/22/69
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. FABRICATOR DATE
DESIGN DRAWING NO. [illegible] 80 PLATE
DRAWN BY [illegible] DATE MARCH 24, 1969
CHECKED BY J.B. PAUL DATE MARCH 24, 1969
IN CHARGE OF PROD. [illegible]
FABRICATION CONT. NO 221
SHEET NO FP-CR7K

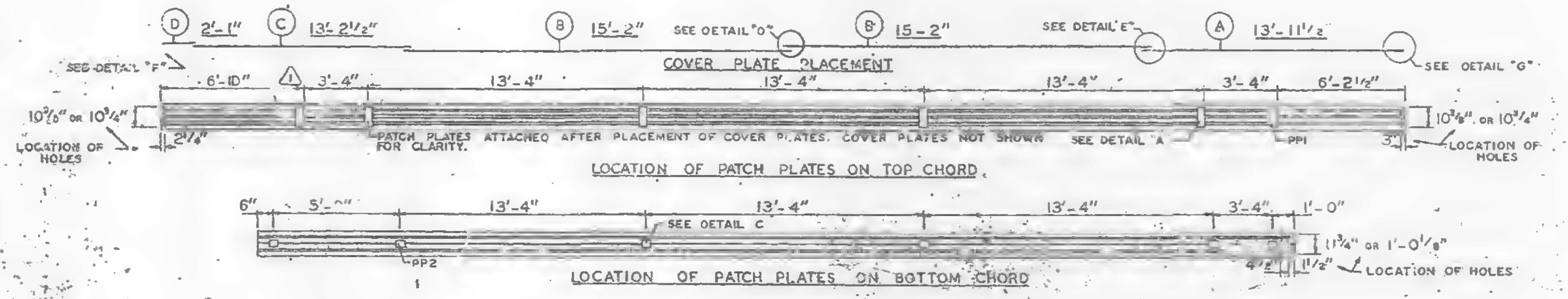

OVERALL LENGTH = 59'-8 1/2"
DAMPING SADDLE
L = "M" + 5 1/4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-3 1/4"
CL4 = 49'-8 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
C_1 = 9'-6 1/2"
CORE END
COLUMN END
A
WC1
WC2
WC3
WC4
TRUSS NO. C32T18 59'-8 1/2" LONG
TRUSS NO. C32T58 59'-8 1/2" LONG
TRUSS NO. C32T8B 59'-8 1/2" LONG
TRUSS NO. C32T7B 59'-8 1/2" LONG
TRUSS NO. C32T7B 59'-8 1/2" LONG
TRUSS NO. C32T2B 59'-8 1/2" LONG
24T10
24T1DA
24T10B
24T16
W = 20'-0"
HC4 = 5 3/8"
C/C HOLES
13'-4"
20'-0"
1'-5 1/2"
DUS-1
DUS-2
2 1/4" ℄ HOLES
℄ HOLES
3"
L = 59'-8 1/2"

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS GD 201, CD 202, OR CD 204

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5B SIZE 20' x 59'-8 1/2"

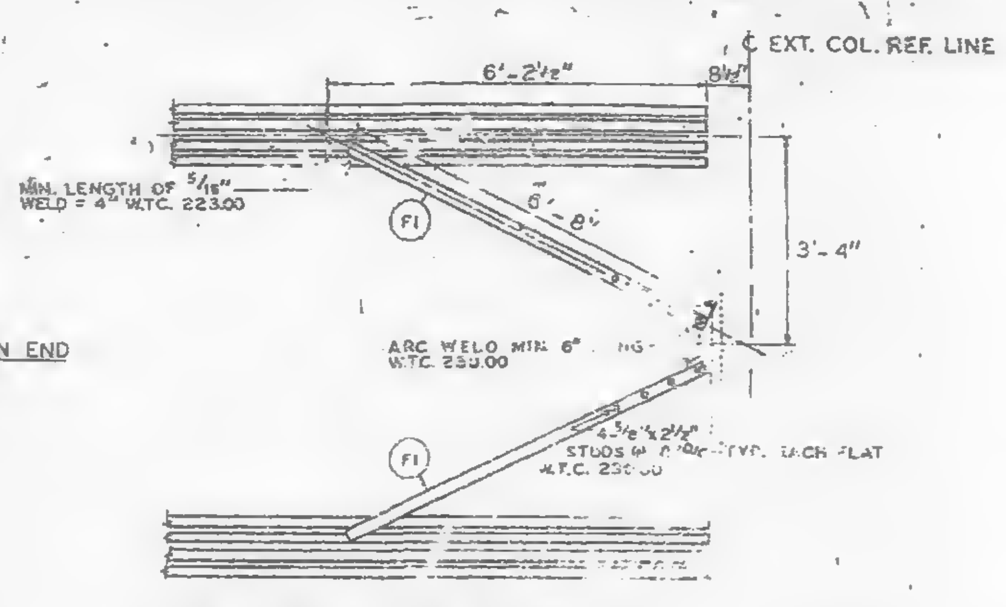




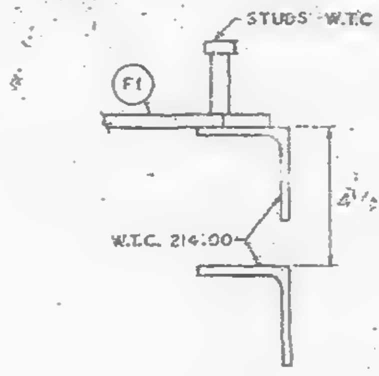
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD


℄ EXT. COL. REF LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN 6" LG W.T.C. 230.00
4 3/8" x 2 1/2" STUDS @ 0'-9" TYP. EACH FLAT W.T.C. 230.00

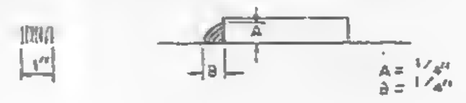
TYPICAL PLAN OF TOP CHORD INCLUDING END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

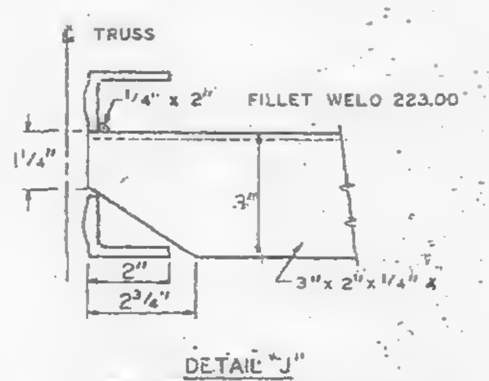


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T18 | 1 | C32T18 – 59'-8 1/2" | ST 201B |
| | T28 | 1 | C32T28 – 59'-8 1/2" | ST 202B |
| | T76 | 2 | C32T78 – 59'-8 1/2" | ST 207B |
| | T86 | 2 | C32T86 – 59'-8 1/2" | ST 208B |
| BRIDGING TRUSSES | T10 | 1 | 24T10 – 19'-11" | ST 210 |
| | T10A | 1 | 24T10A – 19'-11" | ST 210A |
| | T10B | 1 | 24T10B – 19'-11" | ST 210B |
| | T16 | 1 | 24T16 – 19'-11" | ST 216 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 16-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 15 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .38" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ~~ST 400~~ |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

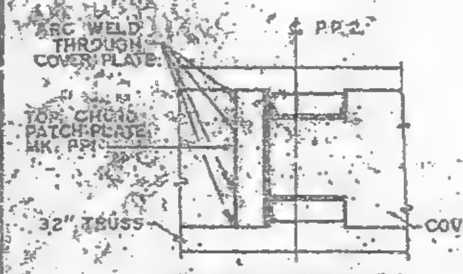




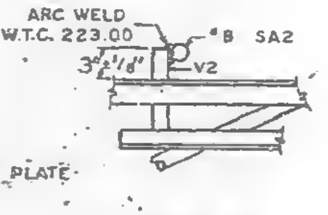
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 7-1-69 | AS NOTED | G.D.C. |
| 1 | 3-11-69 | AS NOTED | G.D.C. |

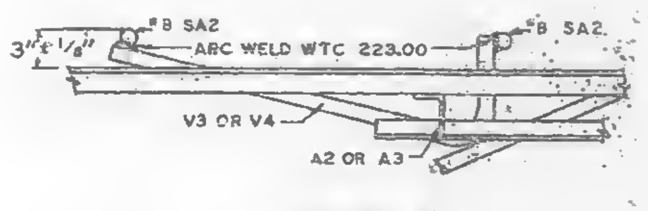
| REF. DRWGS. | | |
|---|---|---|
| | 7-AB2-5 & 11 | 7-22-68 |
| | 7-AB3-71 | 11-25-68 |
| | 7-AB4-3 | 10-15-68 |
| | 7-AB4-15 & 16 | 7-22-68 |
| | 7-AB4-42 | 10-15-68 |
| | SA-124 | 10-11-68 |
| | 7-AB1-5 | 10-15-68 |
| | 7-AB1-2, 3 & 4 | 7-22-68 |



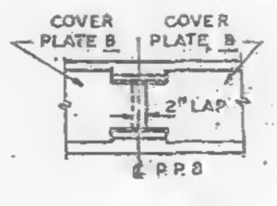
TOP VIEW - DETAIL "A"



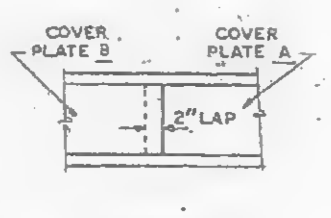
DETAIL "B1"
WHEN APPLICABLE



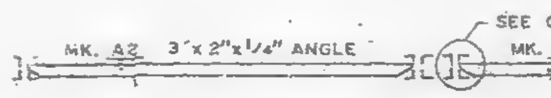
DETAIL "B"
WHEN APPLICABLE



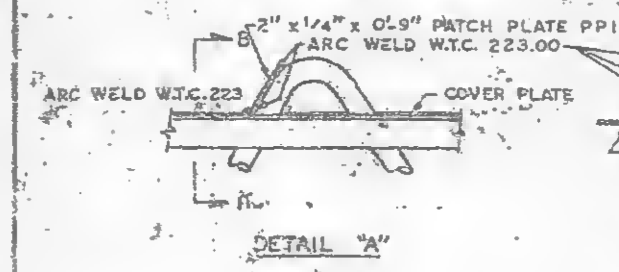
DETAIL "D"



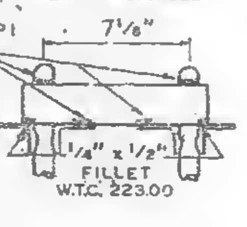
DETAIL "E"



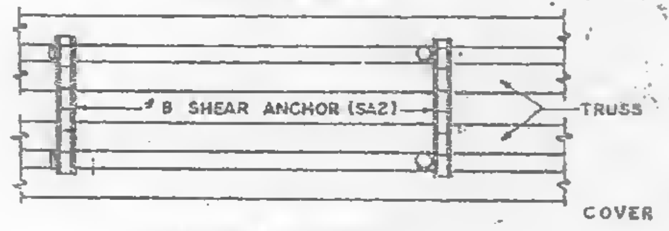
SECTION A-A
END SUPPORT ANGLE



DETAIL "A"

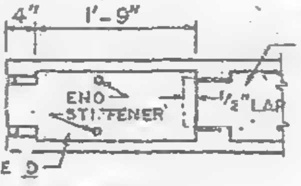


SECTION B-B

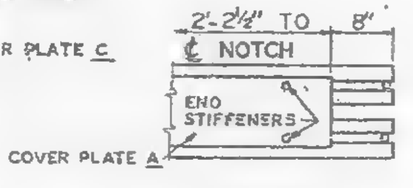


TOP VIEW - DETAIL "B"

COVER PLATES
#29 GA. THICK

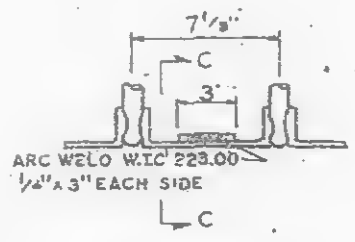


DETAIL "F"

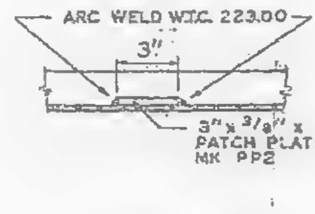


DETAIL "G"

FIELD PUNCH
COVER PLATES OVER
END STIFFENERS W.T.C. 223.00



DETAIL "C"



SECTION C-C

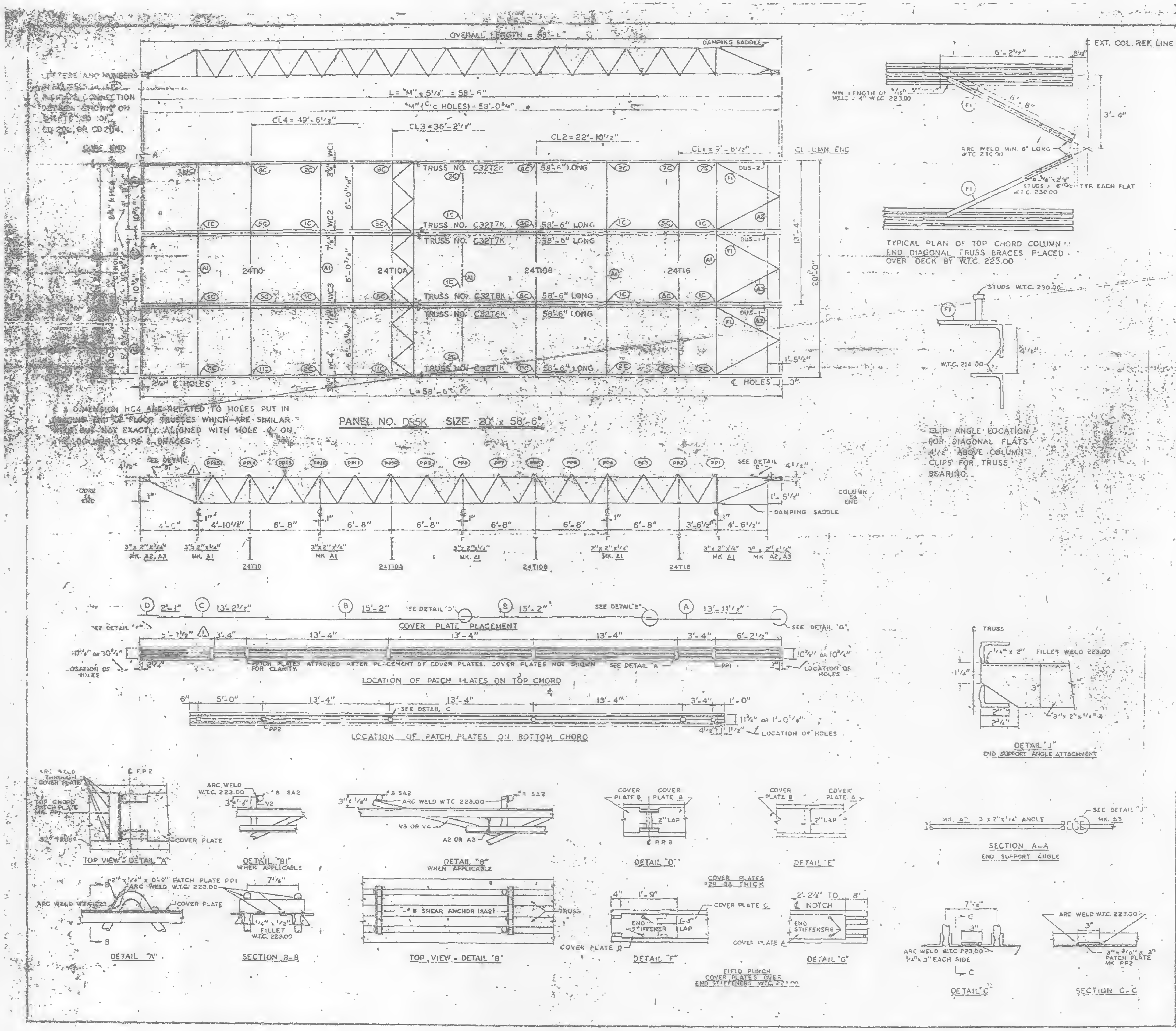
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)
PANEL D5B – 20' x 59'-8 1/2"
BLDG. B FLOORS 83 (WEST) 2

FABRICATION BY: LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-71 | PLATE |
| APPROVED FOR FABRICATION BY James Wh... FOR P.O.N.Y.A. | DATE 1/2/70 | DRAWN BY: gdc DATE JAN 14, 1969 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA DATE JAN 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | | FABRICATION CONT NO. WTC 221 | SHEET NO FP D5B |

LACLEDE STEEL CO


OVERALL LENGTH = 58'-6"
DAMPING SADDLE
LETTERS AND NUMBERS IN CIRCLES ... TO CONNECTION DETAILS SHOWN ON CD 200 OR CD 204
CORE END
COLUMN END
L = "M" + 5¼" = 58'-6"
"M" (C-C HOLES) = 58'-0¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T2K 58'-6" LONG
TRUSS NO. C32T7K 58'-6" LONG
TRUSS NO. C32T7K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T1K 58'-6" LONG
24T10
24T10A
24T108
24T16
DUS-2
DUS-1
WC1
WC2
WC3
WC4
13'-4"
20'-0"
1'-5½"
2¼" ℄ HOLES
℄ HOLES
L = 58'-6"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN ... END OF FLOOR TRUSSES WHICH ARE SIMILAR ... BUT NOT EXACTLY ALIGNED WITH HOLE C ON ... COLUMN CLIPS & BRACES.
PANEL NO. D15K SIZE 20' x 58'-6"
℄ EXT. COL. REF. LINE
6'-2½"
3'-4"
MIN. LENGTH OF ... WELDS ... W.T.C. 223.00
ARC WELD MIN. 6" LONG W.T.C. 230.00
STUDS ... TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "A"
SEE DETAIL "B"
CORE ℄ END
COLUMN ℄ END
DAMPING SADDLE
4'-6"
4'-10½"
6'-8"
3'-6½"
4'-6½"
3" x 2" x ¼" MK. A2, A3
3" x 2" x ¼" MK. A1
COVER PLATE PLACEMENT
Ⓓ 2'-1"
Ⓒ 13'-2½"
Ⓑ 15'-2"
Ⓐ 13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
13'-4"
3'-4"
6'-2½"
10¾" or 10¾"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD
5'-0"
1'-0"
SEE DETAIL C
PP2
11¾" or 1'-0⅛"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
℄ TRUSS
FILLET WELD 223.00
3" x 2" x ¼" A
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3" x 2" x ¼" ANGLE
SEE DETAIL "J" MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP2
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
#8 SA2
DETAIL "B1" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "D"
DETAIL "E"
3" x ¼" x 0'-0" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
COVER PLATE
DETAIL "A"
FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
COVER PLATES #20 GA. THICK
COVER PLATE C
END STIFFENER
1'-3" LAP
COVER PLATE D
DETAIL "F"
2'-2½" TO 8'
℄ NOTCH
END STIFFENERS
COVER PLATE A
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x ⅜" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | [illegible] |
|---|---|---|---|---|
| MATERIAL | MK | PC'S | SIZE | |
| FLOOR TRUSSES | T1K | 1 | C32T1K - 58'-6" | [illegible] |
| | T2K | 1 | C32T2K - 58'-6" | [illegible] |
| | T7K | 2 | C32T7K - 58'-6" | [illegible] |
| | T8K | 2 | C32T8K - 58'-6" | [illegible] |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-[illegible] | [illegible] |
| | T10A | 1 | 24T10A - 19'-[illegible] | [illegible] |
| | T108 | 1 | 24T108 - 19'-[illegible] | ST 2108 |
| | T16 | 1 | 24T16 - 16'-[illegible] | [illegible] |
| 3" x 2" x ¼" ANG. S | A1 | 5 | 3" x 2" x ¼" x 1'-[illegible] | [illegible] |
| | A2 | 4 | 3" x 2" x ¼" x 5[illegible] | [illegible] |
| | A3 | 2 | 3" x 2" x ¼" x [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | 8 | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 18 | 2" x [illegible] x 0'-3" | [illegible] |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | [illegible] |
| | B | 6 | 9" x .0135" x 15'-2" | [illegible] |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 8 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | F1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P8 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

A = ⅛"
B = ⅛"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 7-1-69 | AS NOTED | G.D.C. |
| 1 | 3-11-69 | AS NOTED | G.D.C. |

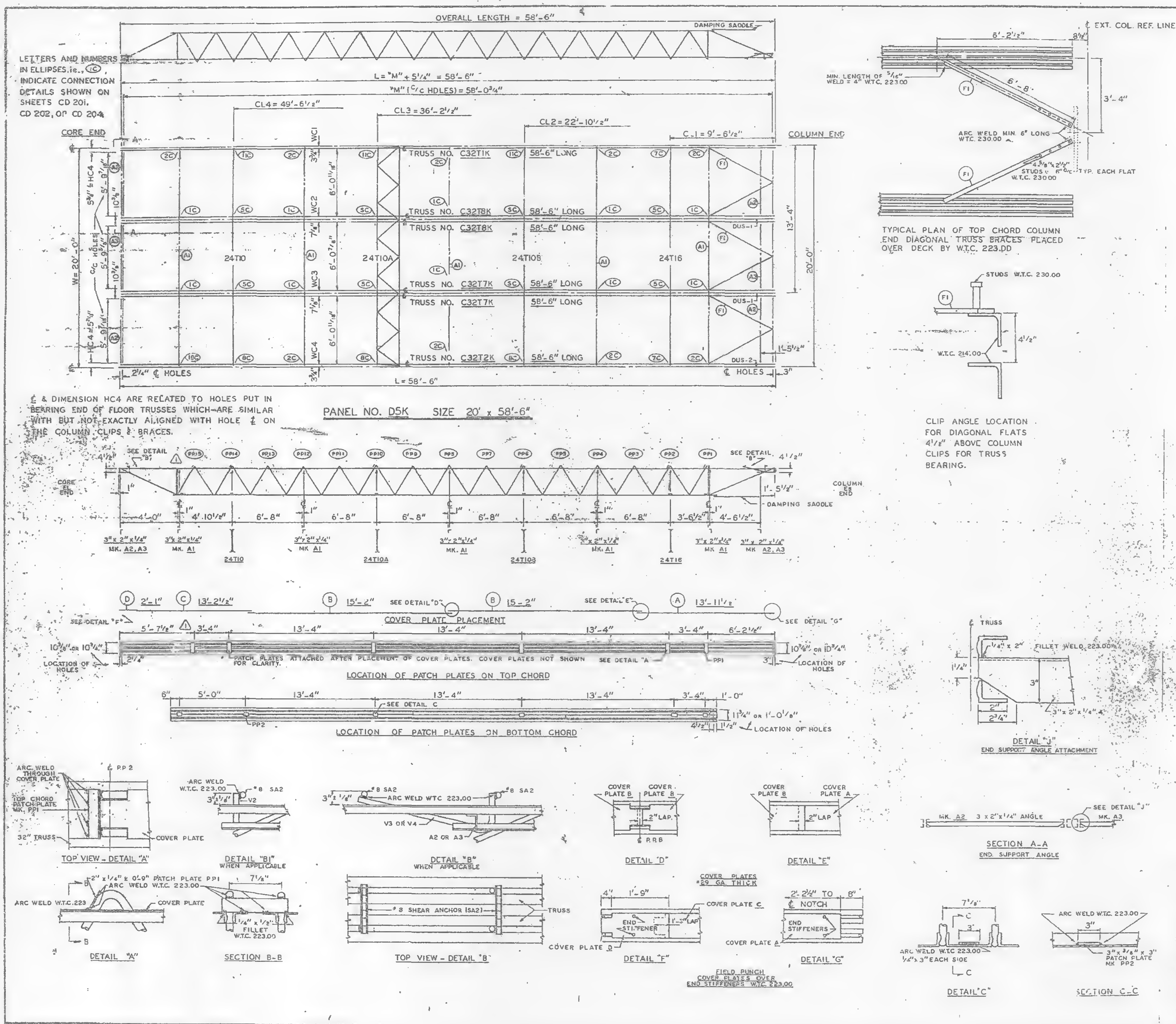
REF. DRWGS.

| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-72 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 & 46 (SOUTH)
PANEL DETAIL [illegible] x 58'-6
BLDG. B FLOORS 45 & 46 (EAST) 2

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James White FOR PONYA DATE 1/2/70
APPROVED FOR FABRICATION BY ... FOR FABRICATOR DATE
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO. 7-AB3 72 4-15-68
DRAWN BY gdc DATE JAN. 4, 1969
CHECKED BY: T.M.CHIRA DATE JAN. 14, 1969
FABRICATION CONT. NO. W.T.C. 221
IN CHARGE OF PROD. DEV.
SHEET NO. FF D15K


OVERALL LENGTH = 58'-6"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
L = "M" + 5¼" = 58'-6"
"M" (C/C HOLES) = 58'-0¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
C-1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T7K 58'-6" LONG
TRUSS NO. C32T7K 58'-6" LONG
TRUSS NO. C32T2K 58'-6" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
W = 20'-0"
13'-4"
20'-0"
2¼" ℄ HOLES
℄ HOLES
L = 58'-6"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. D5K SIZE 20' x 58'-6"
EXT. COL. REF. LINE
8'-2½"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN. 6" LONG W.T.C. 230.00
STUDS W.T.C. 230.00 TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4½"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4⅛" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B1"
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
4'-0"
4'-10½"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6½"
4'-6½"
3" x 2" x ¼" MK. A2, A3
3" x 2" x ¼" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL C
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TRUSS
¼" x 2" FILLET WELD 223.00
3" x 2" x ¼"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3 x 2" x ¼" ANGLE
SEE DETAIL "J" MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
#8 SA2
DETAIL "B1" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
2" x ¼" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
COVER PLATE
DETAIL "A"
¼" x 1½" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #29 GA. THICK
END STIFFENER
COVER PLATE C
COVER PLATE D
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2'-2½" TO 8"
℄ NOTCH
END STIFFENERS
COVER PLATE A
DETAIL "G"
ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x ⅜" x 3" PATCH PLATE MK PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | SET DRWS. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1K | 1 | C32T1K - 58'-6" | ST 201K |
| | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T7K | 2 | C32T7K - 58'-6" | ST 207K |
| | T8K | 2 | C32T8K - 58'-6" | ST 208K |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅜" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ⌀ x 1-3" | ST 400 |
| | C94 | 6 | 1" ⌀ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .38" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 8½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

1"
A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ② | 7-1-69 | AS NOTED | G.D.C. |
| ① | 3-11-69 | AS NOTED | G.D.C. |

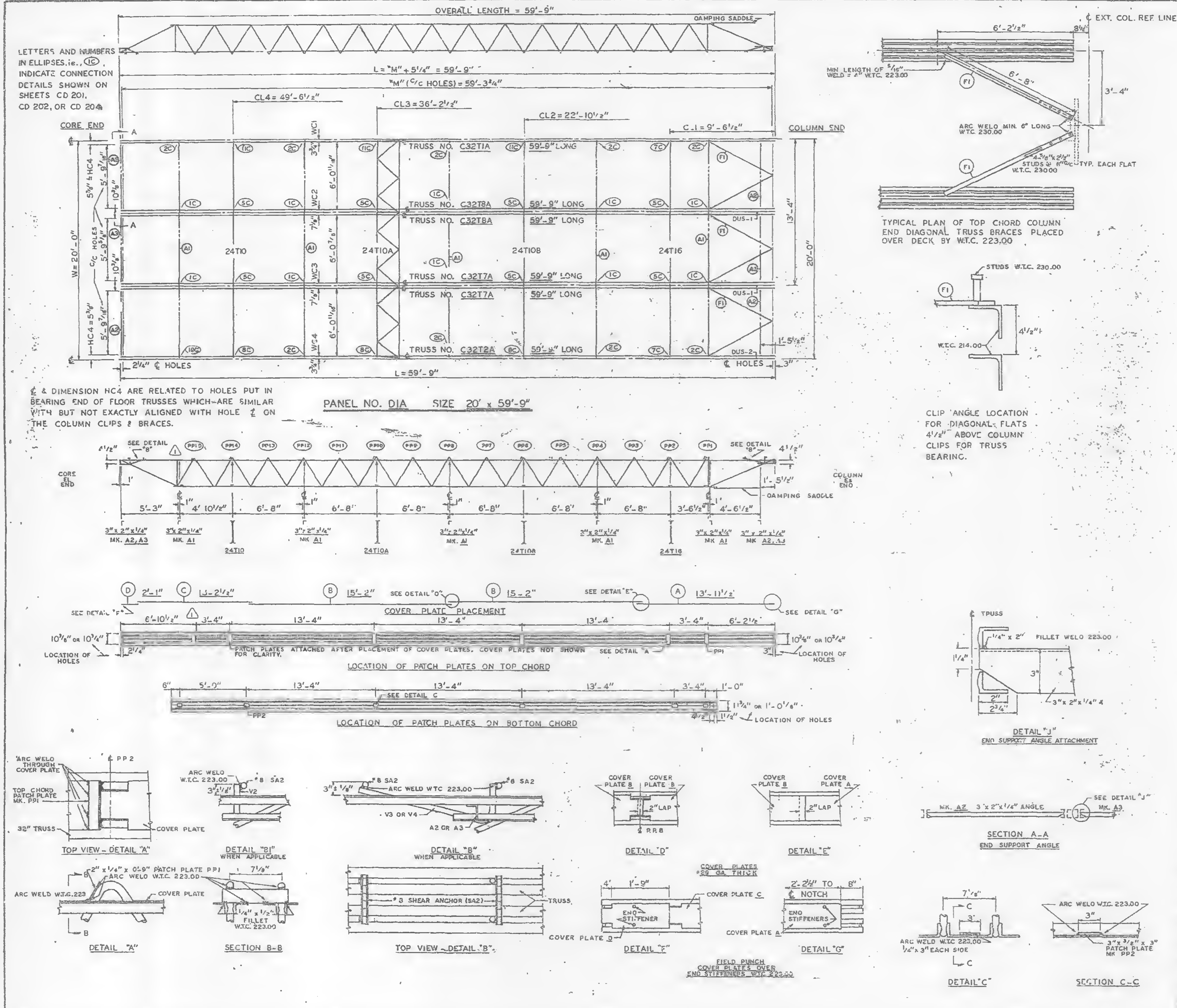
| REF. DRWGS. | | |
|---|---|---|
| | 7-A82-5 & 11 | 7-22-68 |
| | 7-A83-71 | 11-29-68 |
| | 7-A84-3 | 10-15-68 |
| | 7-A84-15 & 16 | 7-22-68 |
| | 7-A84-42 | 10-15-68 |
| | SA-124 | 10-11-68 |
| | 7-A81-5 | 10-15-68 |
| | 7-A81-2 & 3 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)
PANEL D5K @ 73'-6"
BLDG. B FLOORS 45 (EAST & WEST) 46 (EAST) ②

FABRICATION BY. LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James [illegible] FOR P.N.Y.A. DATE 1/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY CARL WEBER
DESIGN DRAWING NO 7-A83-71
DRAWN BY gdc DATE JAN 14, 1969
CHECKED BY T.M. CHURA DATE JAN 14, 1969
FABRICATION CONT NO W.T.C. 221
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO FP D5K



LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIA SIZE 20' x 59'-9"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL |  |  |  | REF |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T1A | 1 | C32T1A - 59'-9" | ST 201A |
|  | T2A | 1 | C32T2A - 59'-9" | ST 202A |
|  | T7A | 2 | C32T7A - 58'-9" | ST 207A |
|  | T8A | 2 | C32T8A - 59'-9" | ST 208A |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
|  | T10A | 1 | 24T10A - 19'-11" | BT 210A |
|  | T10B | 1 | 24T10B - 19'-11" | BT 210B |
|  | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3"x 2"x¼" ANGLE | A1 | 5 | 3"x 2"x¼"x 19'-11" | ST 403 |
|  | A2 | 4 | 3"x 2"x¼" x 5'-11⅜" | ST 403 |
|  | A3 | 2 | 3"x 2"x¼" x 5'-11¾" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1½" x ⅜" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
|  | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
|  | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
|  | C | 3 | 9"x .0135" x 13'-2½" | ST 303 |
|  | D | 3 | 9"x .0135"x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2"x 1½" x¼"x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-0" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x ⅜"x 3'-6⅞" | ST 298 |
|  | DUS-2 | 1 | 3½"x 3½"x ⅜"x 3'-8⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
|  | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
|  | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
|  | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
|  | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
|  | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

|  |  |  |  |
|---|---|---|---|
|  |  |  |  |
| ⚠1 | 6-10-69 | AS NOTED | G.D.C. |
| BY | DATE | REVISION | BY |

⚠1 REF. DRWGS.

| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-9 | 10-15-68 |
| 7-A84-39 | 7-22-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 & 3 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-A81-2, 3 & 4 | 7-22-68 |
| 7-A81-3, 4 & 5 | 10-15-68 |

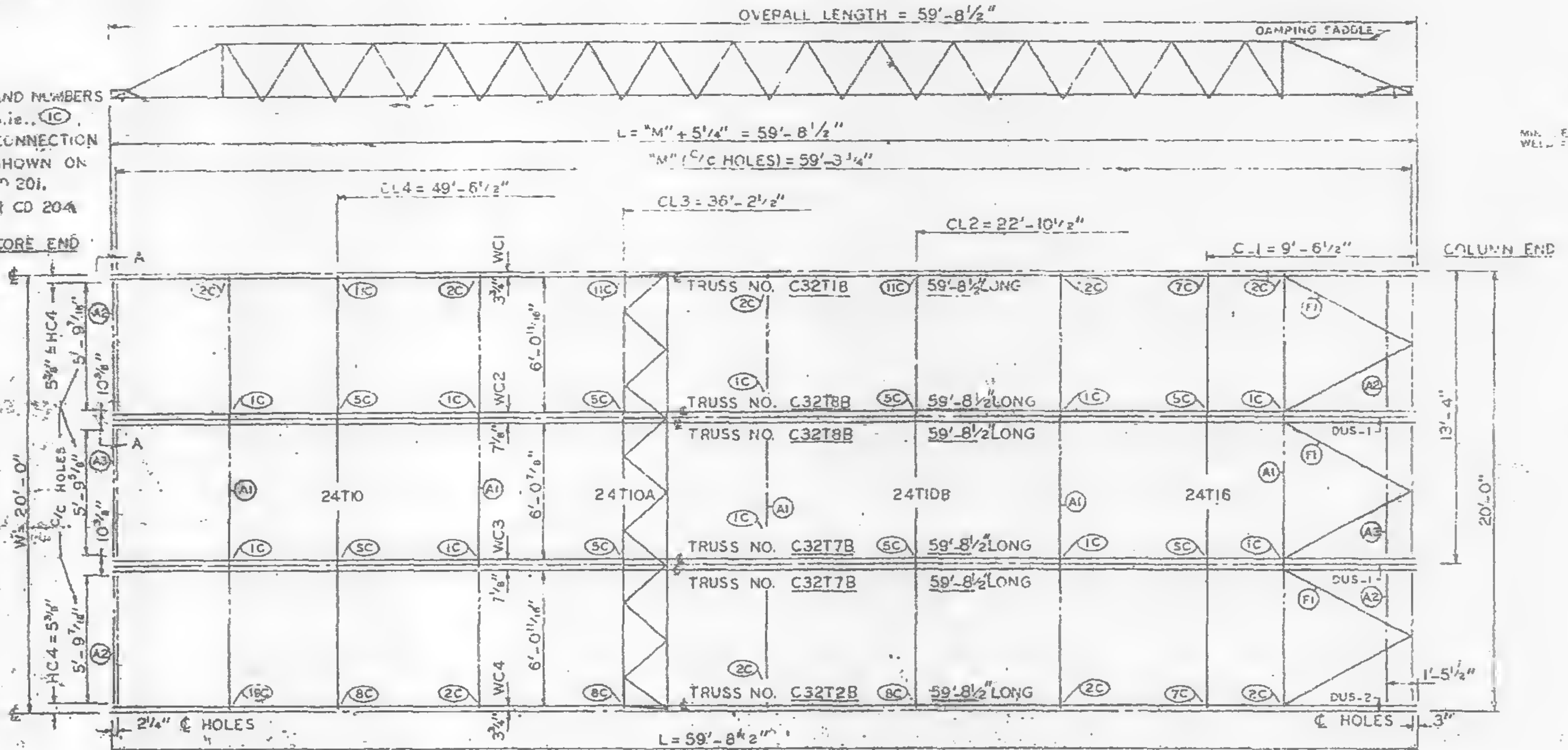
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 4--58, 60-66, 68,
69 (NORTH) PANEL D1A = 20' x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST) ⚠1

FABRICATION BY: LACLEDE STEEL COMPANY

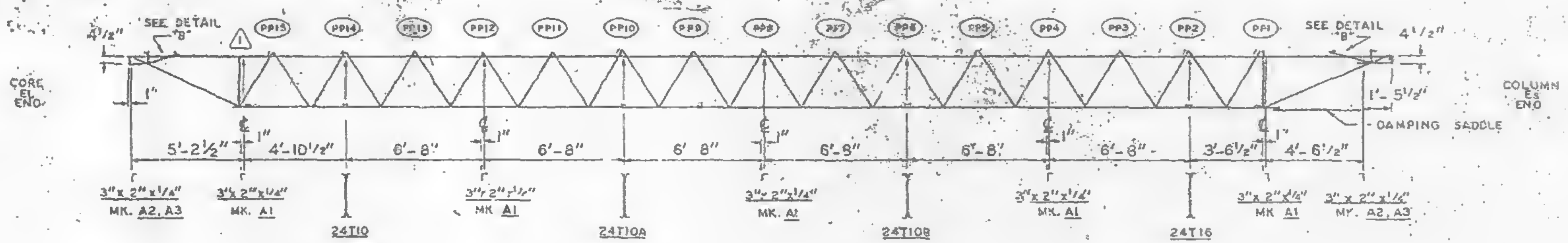
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-9 4-15-68
PLATE
APPROVED FOR FABRICATION BY James [illegible] FOR P.N.Y.A. DATE 1/2/70
DRAWN BY gdc DATE JULY 22, 1968
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE JULY 22, 1968
IN CHARGE OF PROD. OEV
DETAILED BY [illegible] WEBER
FABRICATION CONT NO. W.T.C. 221
SHEET NO. FP DIA

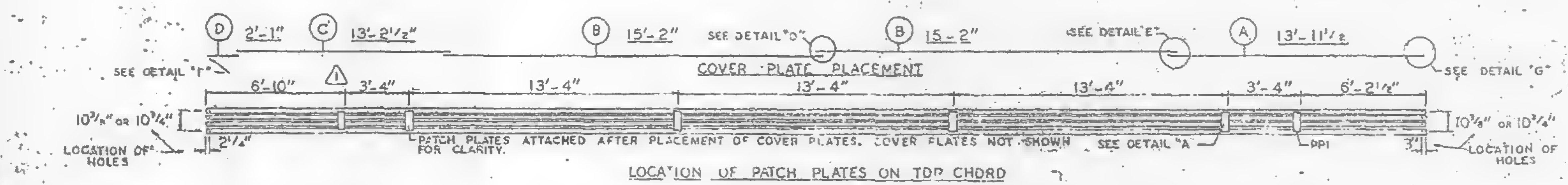
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), NDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

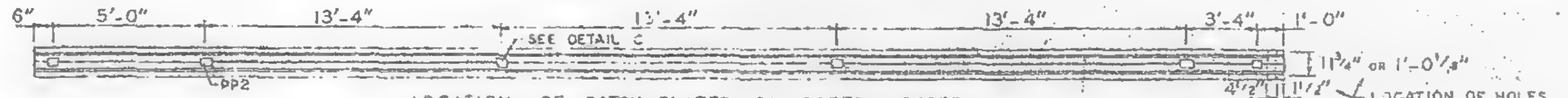
PANEL NO. D18 SIZE 20' x 59'-8½"



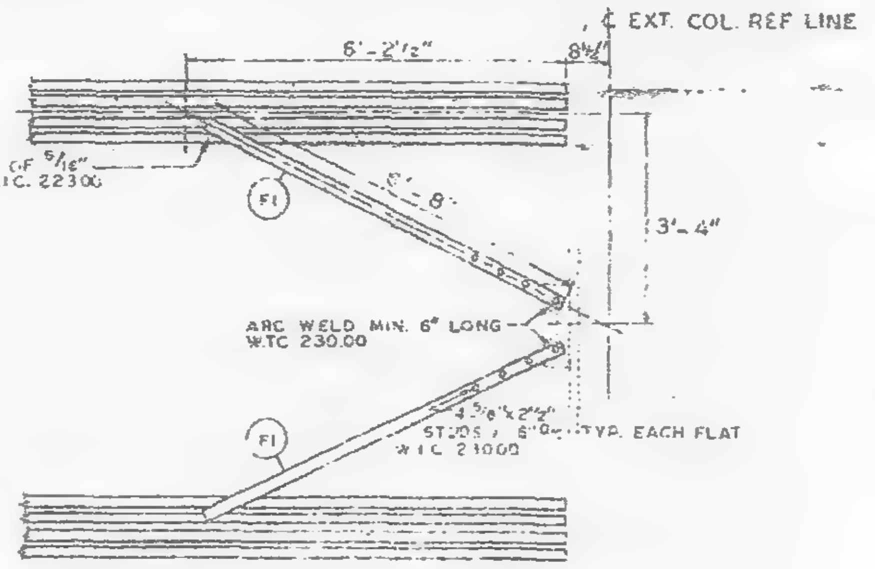


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

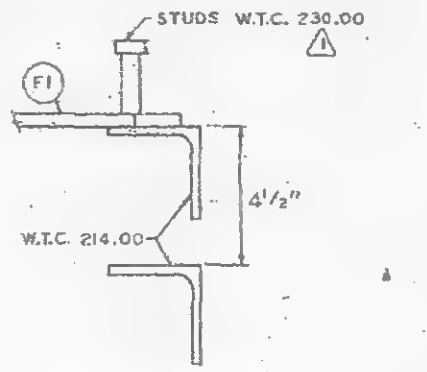
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD


℄ EXT. COL. REF LINE
6'-2½"
8½"
3'-4"
F1
F1
LENGTH OF 5/16" = 4" W.T.C. 223.00
ARC WELD MIN. 6" LONG W.T.C. 230.00
4⅝" x 2½" STUDS @ 6" O.C. TYP. EACH FLAT W.T.C. 230.00

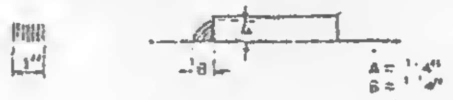
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



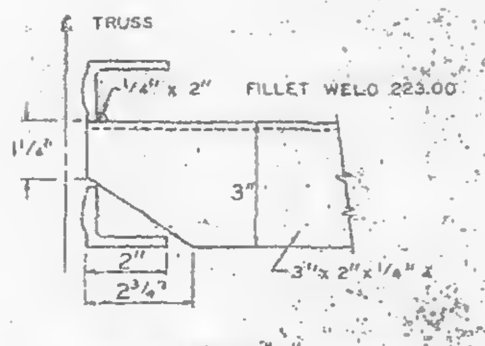
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | [illegible] |
| FLOOR TRUSSES | T1B | 1 | C32T1B - 59'-8½" | ST [illegible] B |
| | T2B | 1 | C32T2B - 59'-8½" | ST [illegible] |
| | T7B | 2 | C32T7B - 59'-8½" | ST [illegible] 7B |
| | T8B | 2 | C32T8B - 59'-8½" | ST [illegible] 8B |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST [illegible] |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| DIAGONAL FLATS | F1 | [illegible] | [illegible] x 3'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2⅛" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ¾" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅞" x 3'-0⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ɸ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ¾" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x [illegible]-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .32" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET



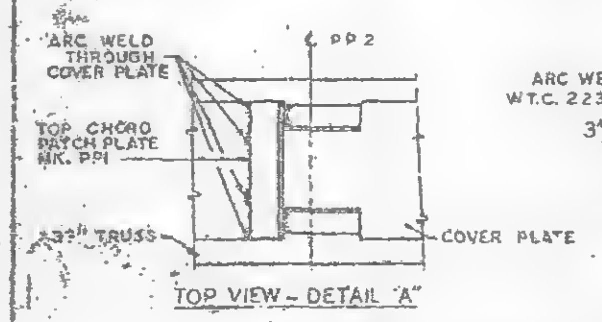
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-9-69 | AS NOTED | G.D.C. |



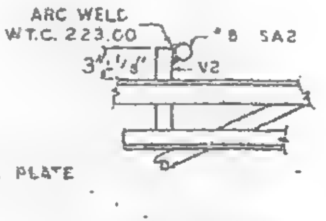
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

⚠1 REF. DRWGS.

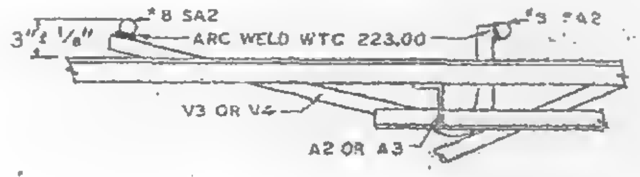
| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-9 | 10-15-68 |
| 7-AB4-3,1 | [illegible] 3-68 |
| 7-AB4-15, 6 & 30 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SC-124 | 1-6-69 |
| 7-AB1-2,3 & 4 | 7-22-68 |
| 7-AB1-5 | 10-15-68 |



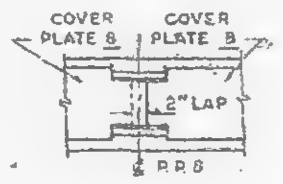
TOP VIEW - DETAIL "A"



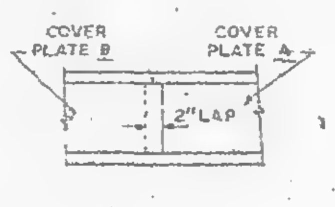
DETAIL "B1"
WHEN APPLICABLE



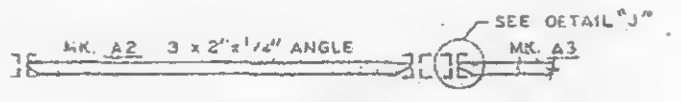
DETAIL "B"
WHEN APPLICABLE



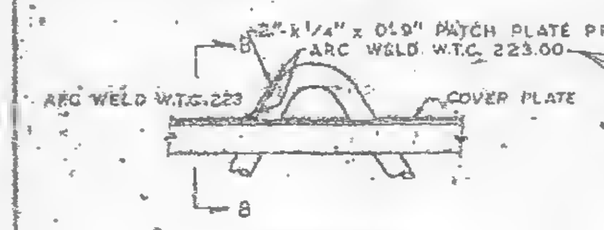
DETAIL "D"



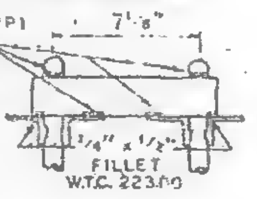
DETAIL "E"



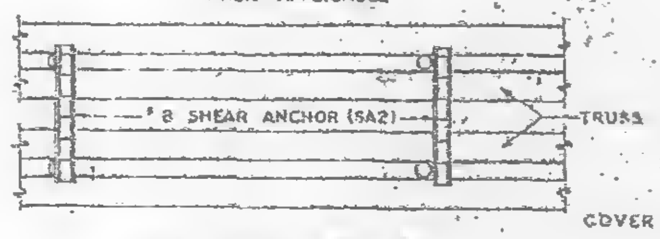
SECTION A-A
END SUPPORT ANGLE



DETAIL "A"

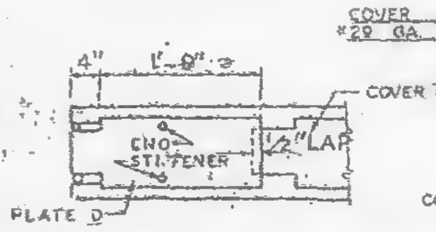


SECTION B-B

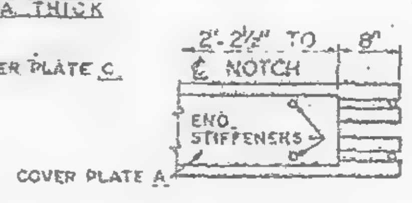


TOP VIEW - DETAIL "B"

COVER PLATES
#29 GA. THICK

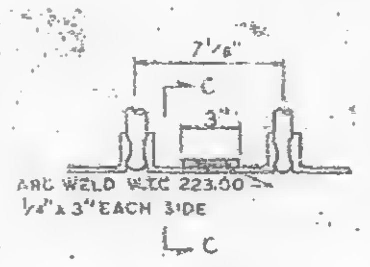


DETAIL "F"

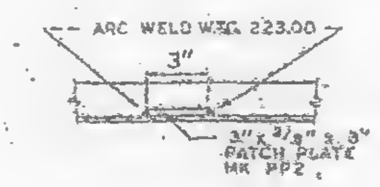


DETAIL "G"

FIELD PUNCH
COVER PLATES OVER
END STIFFENERS W.T.C. 223.00



DETAIL "C"

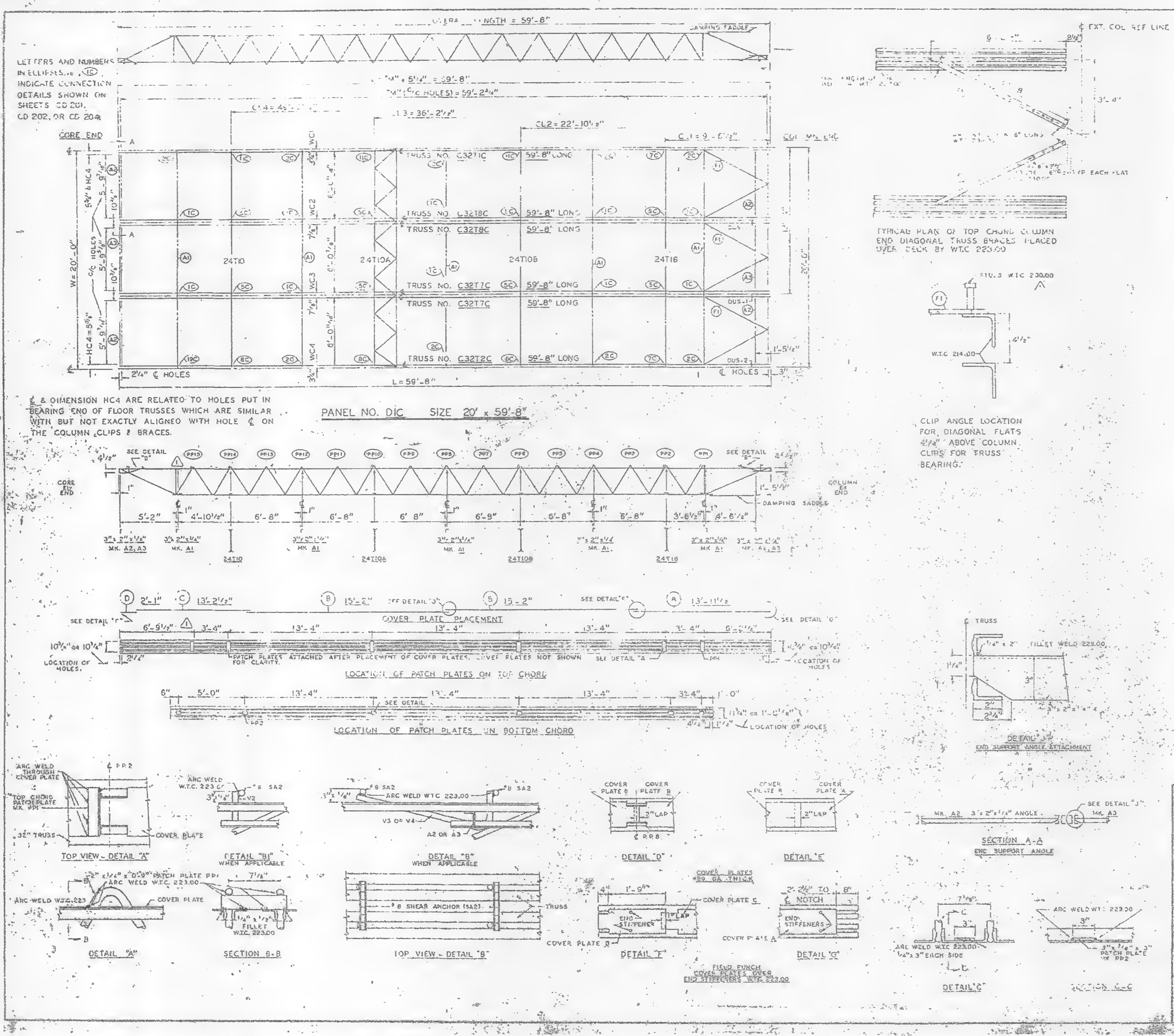


SECTION C-C

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
HE PORT OF NEW YORK AUTHORITY

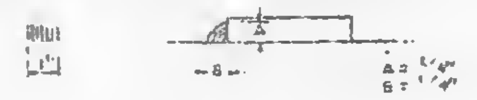
BLDG. A FLOORS 84-91, 93-106 (N)
PANEL D18 - 20' x 59'-8½"
BLDG. B FLOORS 84-91, 93-106 (WEST) ⚠1

| | | | |
|---|---|---|---|
| FABRICATION BY LACLEDE STEEL COMPANY | | | |
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-9 | [illegible] |
| APPROVED FOR FABRICATION BY James White FOR P.N.Y.A. | DATE 1/2/70 | DRAWN BY G.D.C. DATE OCT 24, 1968 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY T.M.CHURA DATE OCT 24, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP-D18 |


LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.
OVERALL LENGTH = 59'-8"
DAMPING SADDLE
CORE END
COL. END
TRUSS NO. C32T1C 59'-8" LONG
TRUSS NO. C32T8C 59'-8" LONG
TRUSS NO. C32T7C 59'-8" LONG
TRUSS NO. C32T2C 59'-8" LONG
24T10
24T10A
24T10B
24T16
W = 20'-0"
L = 59'-8"
CL2 = 22'-10½"
CL3 = 36'-2½"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. D1C SIZE 20' x 59'-8"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
℄ EXT. COL. REF. LINE
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
W.T.C. 214.00
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES, COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
COVER PLATES #20 GA. THICK
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "C"
SECTION C-C
#8 SHEAR ANCHOR (SA2)
ARC WELD W.T.C. 223.00

| [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|
| [illegible] TRUSSES | [illegible]C1 | [illegible] | [illegible] 59'-8 | ST [illegible] |
|  | [illegible]C |  | C32[illegible]C 59'-8" | ST [illegible] |
|  | [illegible]C | 2 | [illegible] 59'-8" | [illegible] |
|  | T8C | 2 | C32T8C 59'-8 | ST [illegible] |
| BRIDGING TRUSSES | T10 | 1 | 24T10 [illegible] 19'-11" | ST [illegible] |
|  | T10A | 1 | 24T10A [illegible] 19'-[illegible]" | ST 204 |
|  | T10B |  | 24T10B [illegible] 19'-11" | ST 209 |
|  | T16 | 1 | 24T16 [illegible] 19'-11" | ST 218 |
| [illegible] ANGLE | A1 | 4 | [illegible] x 2" x [illegible] x 19'-11" | ST 4[illegible] |
|  | A2 | 4 | [illegible] x 5'-[illegible]" | ST [illegible] |
|  | A3 | 2 | 3" x 2" x ¼" x 5'-[illegible]" | ST 4[illegible] |
| [illegible] | F | 6 | [illegible] x 8'-8" | [illegible] |
| [illegible] PLATES | PP[illegible] | 18 | 2" x [illegible] x 0'-3" | ST [illegible] |
|  | PP2 | 6 | 3" x [illegible] x 0'-3" | ST [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST [illegible] |
|  | [illegible] | [illegible] | 9" x [illegible] x 15'-2" | ST [illegible] |
|  | [illegible] | 3 | 9" x .0135" x 13'-2½" | ST 303 |
|  | D | 3 | 9" x .0135" x 2'-1" | ST 302 |
| SADDLE [illegible] | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | # 8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
|  | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-7" | ST 400 |
|  | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | [illegible] x [illegible] x [illegible] | ST 400 |
|  | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
|  | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
|  | P4 | 3 | 6½" x 1½" x 0'-8" | ST 400 |
|  | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-10-69 | AS NOTED | GDC |

1 REF. DRWGS.

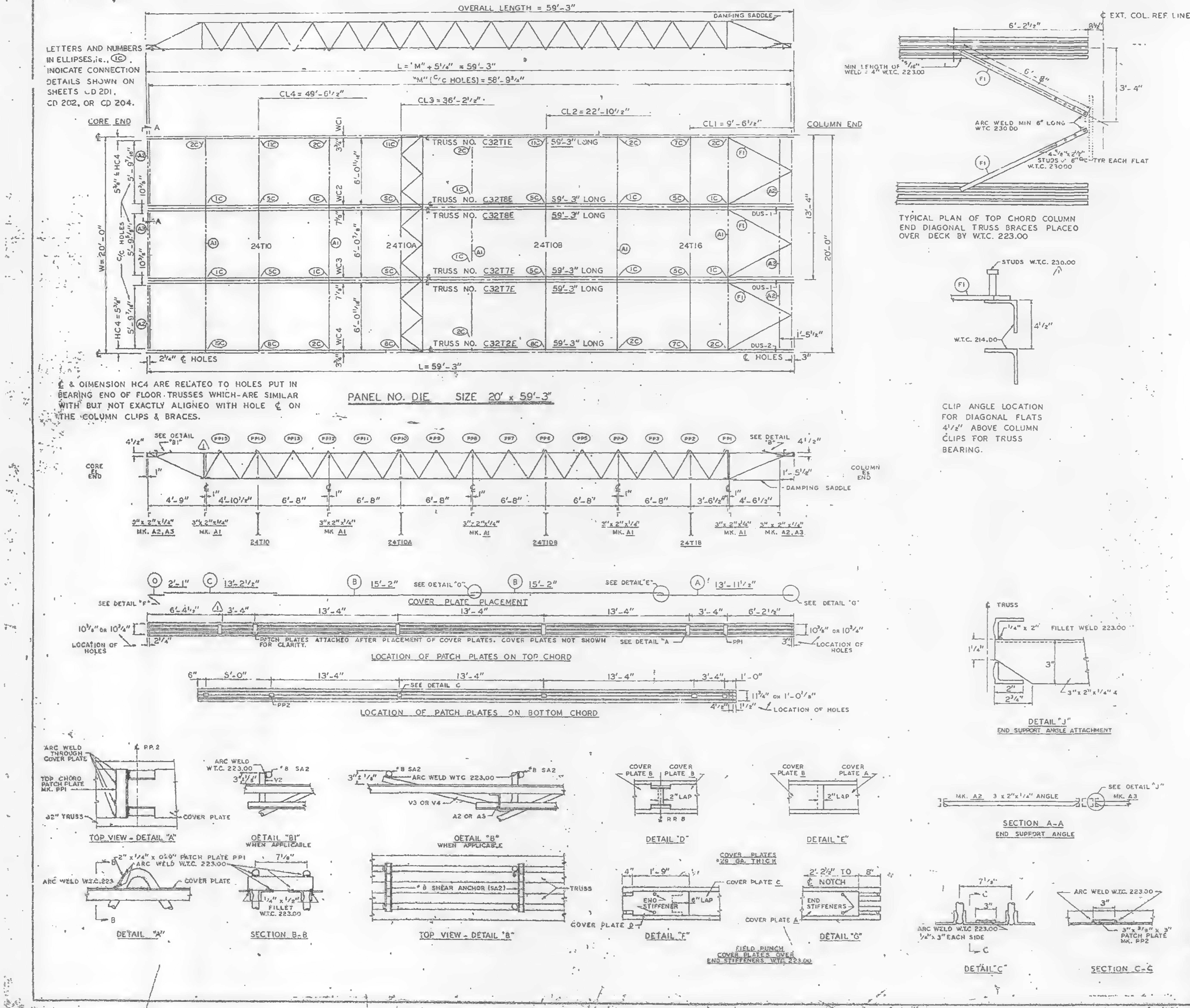
| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-9 | 10-15-68 |
| 7-AB4-31 | 1-3-68 |
| 7-AB4-15, 16 & 3[illegible] | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SC-124 | 1-6-69 |
| 7-381-2, 3 & 4 | 7-22-68 |
| 7-381-5 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91 & 9[illegible]-106 (S)
PANEL NO. [illegible] - 59'-8'
BLDG. B FLOORS 50-58, 60-74, 79-91 & 93-106 [illegible] 1

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-9 | PLATE |
| APPROVED FOR FABRICATION BY James White | DATE 1/2/70 | DRAWN BY GDC DATE OCT. 24, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR LACLEDE STEEL CO. | DATE | CHECKED BY [illegible] DATE OCT. 24, 1968 | [illegible] |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. WTC 221 | SHEET NO. FP D1C-[illegible] |



LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIE SIZE 20' x 59'-3"

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLE

TOP VIEW - DETAIL "A"

DETAIL "B1" WHEN APPLICABLE

DETAIL "B" WHEN APPLICABLE

DETAIL "D"

DETAIL "E"

DETAIL "A"

SECTION B-B

TOP VIEW - DETAIL "B"

COVER PLATES #20 GA. THICK

DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "C"

SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1E | 1 | C32T1E - 59'-3" | ST 201E |
| | T2E | 1 | C32T2E - 59'-3" | ST 202E |
| | T7E | 2 | C32T7E - 59'-3" | ST 207E |
| | T8E | 2 | C32T8E - 59'-3" | ST 208E |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-9⅝" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅜" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST |
| COVER PLATES | A | 3 | 9" .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½ | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1 - 3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 0'-2" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = 1¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 5-9-69 | AS NOTED | GDC |

REF. DRWGS.
7-AB2-5 & 11 7-22-68
7-AB3-9 10-15-68
7-AB4-3.1 1-3-68
7-AB4-15 & 16, 39 7-22-68
7-AB4-3 & 42 10-15-68
SA-124 1-5-69
7-AB1-2, 3 & 4 7-22-68
7-AB1-3, 4 & 5 10-15-68

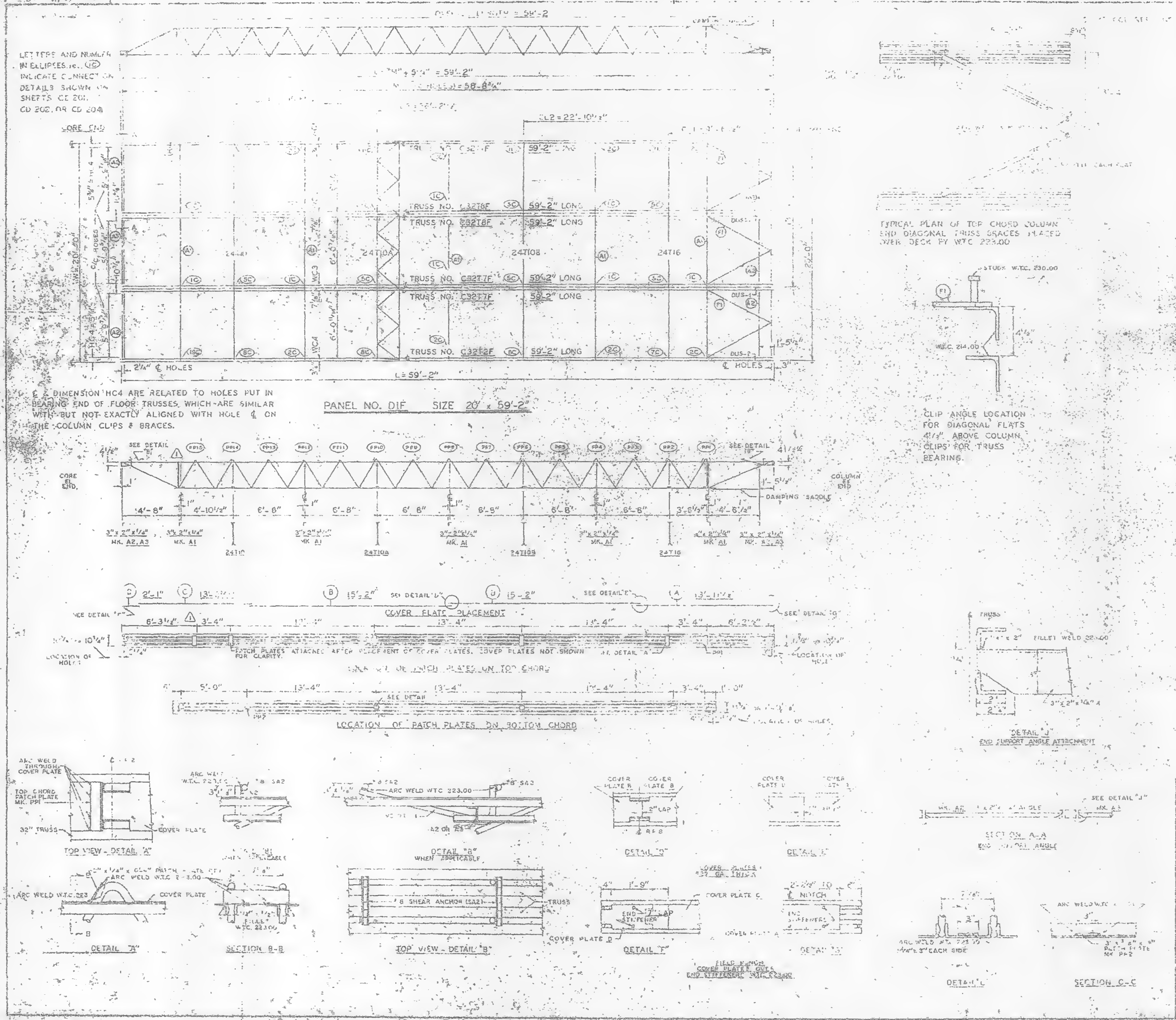
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)

PANEL DIE 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7 AB3-9 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY James Worthe... | DATE 1/2/70 | DRAWN BY adc DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA DATE JULY 22, 1968 | IN CHARGE OF PROG. DEV. |
| DETAILED BY CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DIE |


LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
CORE END
TRUSS NO. C32?F 59'-2" LONG
TRUSS NO. C3278F 59'-2" LONG
TRUSS NO. C3277F 59'-2" LONG
TRUSS NO. C3272F 59'-2" LONG
24T10A
24T108
24T16
L = 59'-2"
2 1/4" ℄ HOLES
℄ HOLES
℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES, WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIF SIZE 20' x 59'-2"
SEE DETAIL "B"
COLUMN END
DAMPING SADDLE
4'-8"
4'-10 1/2"
6'-8"
6'-5"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
FILLET WELD
3"x 2" x 1/4" ∠
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
SEE DETAIL "J"
TOP VIEW - DETAIL "A"
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
DETAIL "A"
ARC WELD W.T.C. 223
SECTION B-B
ARC WELD WTC 223.00
#8 SA2
DETAIL "B" WHEN APPLICABLE
#8 SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
COVER PLATE B
COVER PLATE D
2" LAP
DETAIL "D"
DETAIL "E"
COVER PLATE C
END STIFFENER
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00
DETAIL "G"
DETAIL "C"
ARC WELD W.T.C.
SECTION C-C

|  |  |  |  |  |
|---|---|---|---|---|
| [illegible] | F | [illegible] | [illegible]F - 59'-2" | [illegible]F |
|  | F | [illegible] | [illegible]F - 59'-2" | ST 202F |
|  | F | [illegible] | [illegible]F - 59'-2" | [illegible] 207F |
|  | F | [illegible] | [illegible]F - 59'-2" | ST 208F |
| COVER PLATES | B | 3 | 9" x 0135" x 15'-2" | ST 303 |
|  | C | 3 | 9" x 0135" x 13'-2 1/2" | ST 303 |
|  | D | 3 | 9" x 0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA1 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DS 1 | 2 | 3 1/2" x 3 1/2" x [illegible] | ST 288 |
|  | DS 2 | 1 | 3 1/2" x 3 1/2" x [illegible] | ST 288 |
| CONNECTION BAR | CB1 | 4 | 1 1/4" Ø x 1'-3" | ST 400 |
|  | CB4 | 3 | 1" Ø x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x [illegible] x 6 1/2" | ST 400 |
|  | P2 | 4 | 4 1/2" x .39" x 0'-9" | ST 400 |
|  | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
|  | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
|  | P8 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

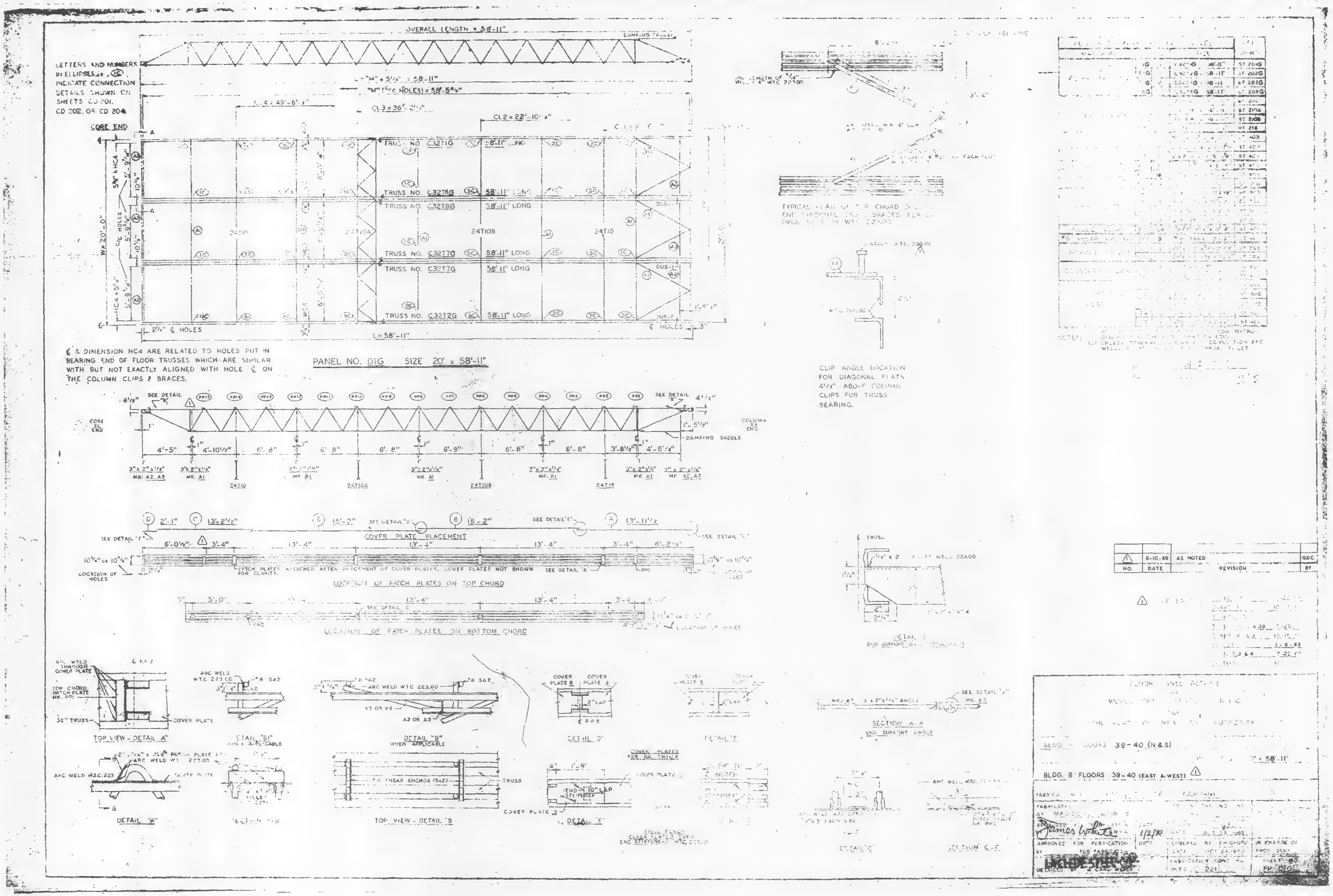
A = 1/4"
B = 1/4"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-10-69 | AS NOTED | G.D.C. |

⚠1 REF. DRWGS.

| | |
|---|---|
| 7-A82-5 & 1? | 7-22-68 |
| A82-6 | 10-14-68 |
| 7-A8?-3? | [illegible] |
| 7-A84-15, 16 & 39. | 7-22-68 |
| 7-A94-42 & 3 | 10-15-68 |
| [illegible]-124 | 1-6-69 |
| [illegible]-2, 3 & 4 | 7-22-68 |
| [illegible]-5 | 10-15-68 |

FLOOR PANEL [illegible]
FOR
WORLD TRADE CENTER [illegible]
[illegible]
[illegible] OF NEW YORK AUTHORITY
BLDG. A FLOORS 47-48, 70-71 (N)
PANEL DIF 20' x 59'-2"
BLDG. B FLOORS 47-48, 70-71 (WEST) ⚠1
FABRICATED BY [illegible] COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION [illegible] James White DATE 1/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY [illegible]
DESIGN DRAWING NO. A83-0
DRAWN BY G.D.C. DATE OCT 24 1968
CHECKED BY T.M.CHURA DATE OCT 24 1968
FABRICATION CONT. NO. WTC 221
SHEET NO. FP-DIF


OVERALL LENGTH = 58'-11"
DAMPING SADDLE
L = "M" + 5¼" = 58'-11"
"M" (℄/C HOLES) = 58'-5¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CORE END
TRUSS NO. C32T1G 58'-11" LONG
TRUSS NO. C32T8G 58'-11" LONG
TRUSS NO. C32T8G 58'-11" LONG
TRUSS NO. C32T7G 58'-11" LONG
TRUSS NO. C32T7G 58'-11" LONG
TRUSS NO. C32T2G 58'-11" LONG
24T10
24T10A
24T10B
24T16
W = 20'-0"
2¼" ℄ HOLES
L = 58'-11"
℄ HOLES 3"
COLUMN END
4'-5"
4'-10½"
6'-8"
6'-8"
6'-8"
6'-9"
6'-8"
6'-8"
3'-6½"
4'-6½"
3"x 2"x ¼" MK. A2, A3
3"x 2"x ¼" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "C"
2'-1"
13'-2½"
15'-2"
15'-2"
13'-11½"
6'-0½"
3'-4"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2½"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
TOP VIEW - DETAIL "B"
SHEAR ANCHOR (SA2)
DETAIL "F"
COVER PLATES #28 GA. THICK
SECTION A-A END SUPPORT ANGLE
SECTION C-C
DETAIL "C"
DETAIL "J" END SUPPORT ANGLE
TYPICAL PLAN OF TOP CHORD ... END DIAGONAL ... BRACES ... OVER ... W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
ARC WELD W.T.C. 223.00

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1G SIZE 20' x 58'-11"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-10-69 | AS NOTED | G.D.C. |

FLOOR PANEL DETAILS

WORLD TRADE CENTER N.Y.C.

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N & S)

20' x 58'-11"

BLDG. B FLOORS 39-40 (EAST & WEST) ⚠1

FABRICATED AT MADISON, WIS.

James White 1/2/70

APPROVED FOR FABRICATION BY

DATE OCT 23, 1968

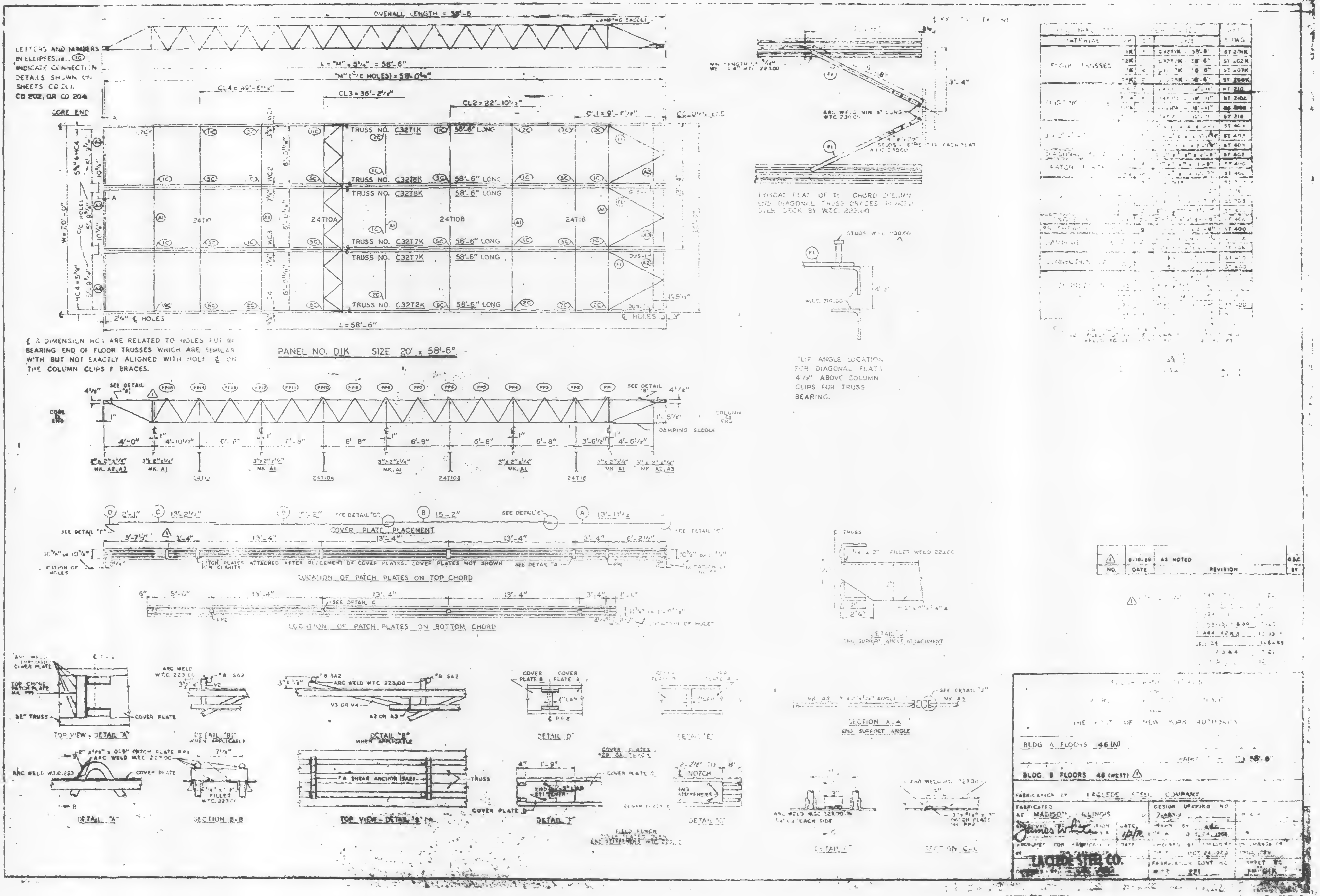
CHECKED BY T.M. CHURCH

DATE OCT 24, 1968

FABRICATION CONT. NO. W.T.C. 221

DETAILED BY

SHEET NO. FP D1G



OVERALL LENGTH = 58'-6
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
L = "M" + 5¼" = 58'-6"
"M" (C/C HOLES) = 58'-0¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T7K 58'-6" LONG
TRUSS NO. C32T7K 58'-6" LONG
TRUSS NO. C32T2K 58'-6" LONG
24T10
24T10A
24T108
24T16
W = 20'-0"
HC4 = 5¼"
2¼" ℄ HOLES
℄ HOLES
L = 58'-6"
℄ A DIMENSION HC'S ARE RELATED TO HOLES FOR BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIK SIZE 20' x 58'-6"
TYPICAL FLAT OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES WELDED TO DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
4'-0" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-9" 6'-8" 6'-8" 3'-6½" 4'-6½"
DAMPING SADDLE
MK. A2, A3
MK. A1
24T10
24T10A
24T108
24T16
D 2'-1" C 13'-2½" B 15'-2" A 13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
COVER PLATE PLACEMENT
5'-7½" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2½"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
6" 5'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"
SEE DETAIL C
LOCATION OF PATCH PLATES ON BOTTOM CHORD
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
TOP VIEW - DETAIL "A"
DETAIL "B" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "D"
DETAIL "E"
SECTION A-A
END SUPPORT ANGLE
SEE DETAIL "J"
DETAIL "A"
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATE
DETAIL "F"
END STIFFENERS
DETAIL "G"
SECTION C-C

| △ | 6-16-69 | AS NOTED | | |
|---|---|---|---|---|
| NO. | DATE | REVISION | | BY |

THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 46 (N)

PANEL [illegible] 58'-6"

BLDG. B FLOORS 46 (WEST) △

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

James White 1/2/70

LACLEDE STEEL CO.

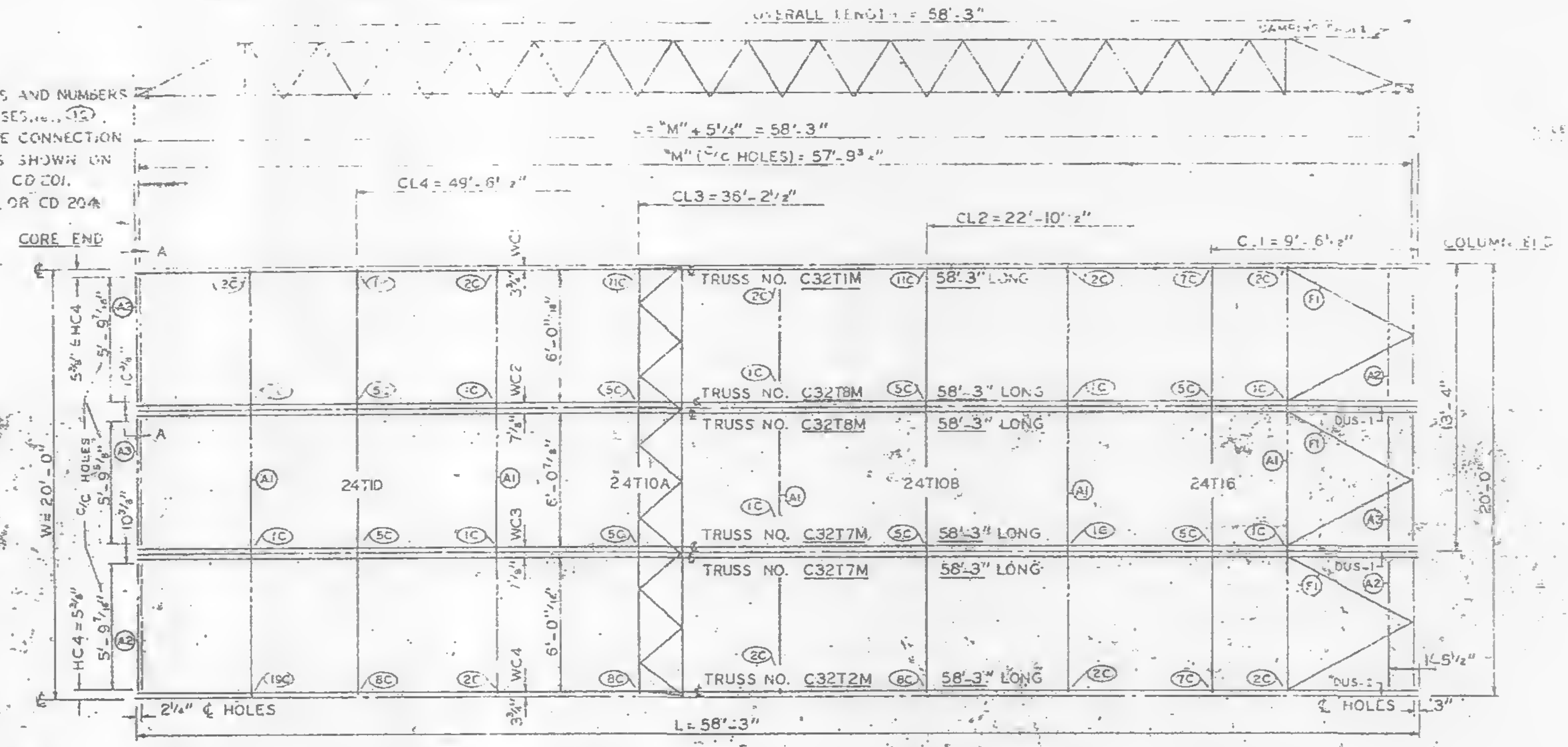
DESIGN DRAWING NO. 7-AB3.9

OCT. 24, 1968

FABRICATION CONT. NO. 221

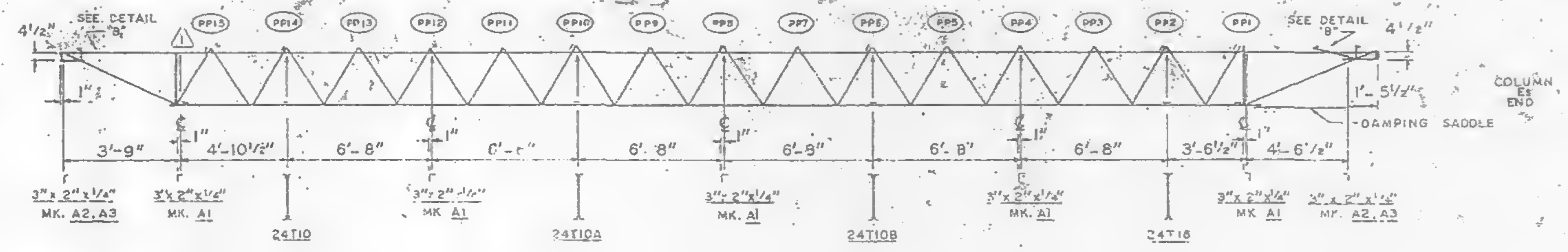
SHEET NO. FP-DIK

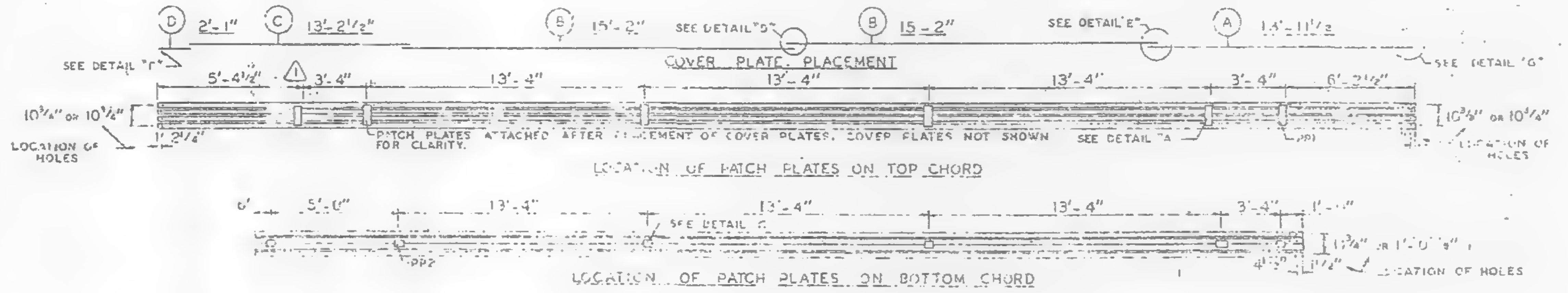
LETTERS AND NUMBERS IN ELLIPSES, i.e. (15), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIM SIZE 20' x 58'-3"

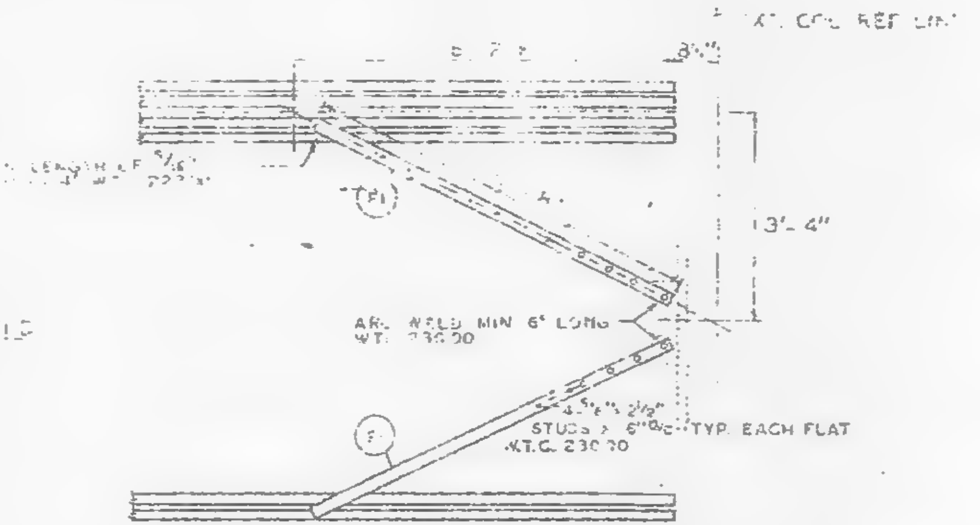




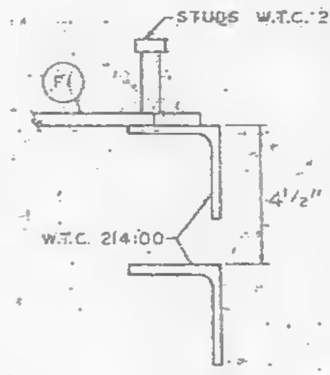
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD


COL. REF. LINE
13'-4"
ARC WELD MIN 6" LONG W.T.C. 223.00
STUDS 6" ℄ TYP. EACH FLAT W.T.C. 230.00
F1

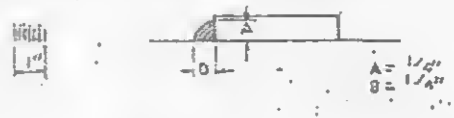
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| MATERIAL | MK. | [illegible] | [illegible] | DWG. |
|---|---|---|---|---|
| FLOOR TRUSSES | T1M | 1 | C32T1M - 58'-3" | ST 201M |
| | T2M | 1 | C32T2M - 58'-3" | ST 202M |
| | T7M | 2 | C32T7M - 58'-3" | ST 207M |
| | T8M | 2 | C32T8M - 58'-3" | ST 208M |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 9'-1[illegible]" | ST 210 |
| | T10A | 1 | 24T10A - 8'-[illegible]" | ST 210A |
| | T10B | [illegible] | 24T10B - 8'-[illegible]" | ST 210B |
| | T16 | [illegible] | [illegible] | ST 216 |
| 3" x 2" x 1/4" ANGLE | A1 | [illegible] | [illegible] | ST 403 |
| | A2 | 6 | 3" x 2" x 1/4" x 5'-10 1/8" | ST 403 |
| | A3 | [illegible] | 3" x 2" x 1/4" x 5'-11 3/8" | ST 403 |
| DIAGONAL FLATS | F | [illegible] | 1 1/2" x 5/8" x 5'-5" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 5/16" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 5/16" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 2 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x .39" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

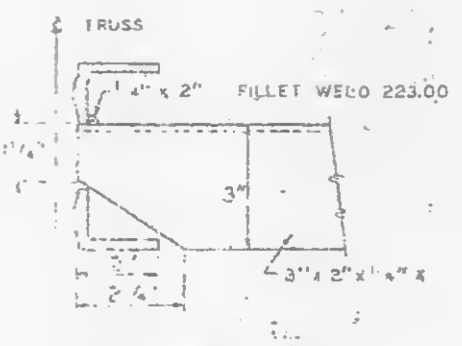
NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



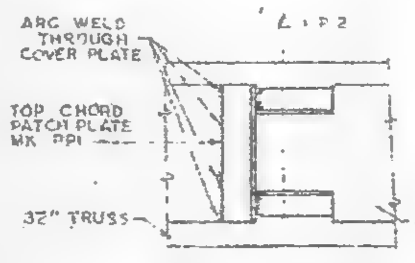
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| △1 | 6-10-69 | AS NOTED | G.D.C. |

REF. DRWGS. △1

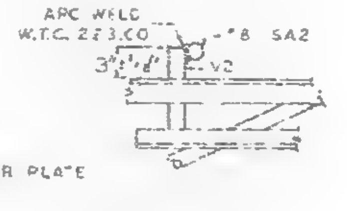
| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-[illegible] | 10-15-68 |
| 7-AB4-31 | [illegible]-68 |
| 7-AB4-15, 16 & 39 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| [illegible]-174 | 1-6-69 |
| 7-AB1-2, 3 & 4 | 7-22-68 |
| 7-AB1-5 | 10-15-68 |



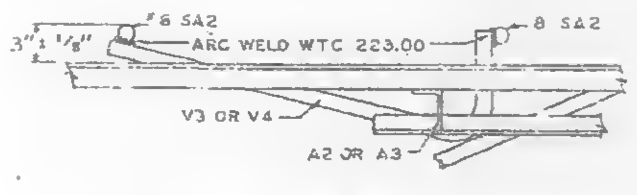
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



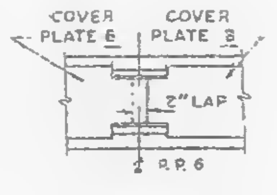
TOP VIEW - DETAIL "A"



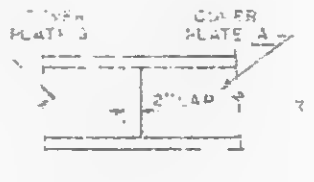
DETAIL "H" WHEN APPLICABLE



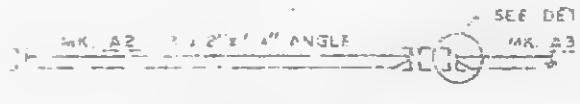
DETAIL "B" WHEN APPLICABLE



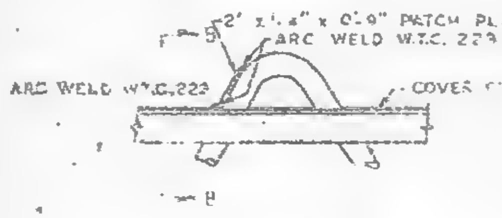
DETAIL "D"



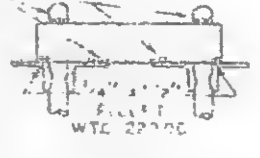
DETAIL "E"



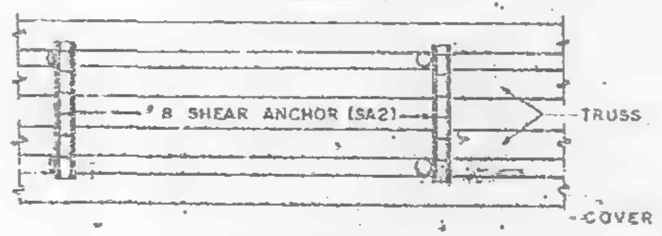
SECTION A-A
END SUPPORT ANGLE



DETAIL "A"

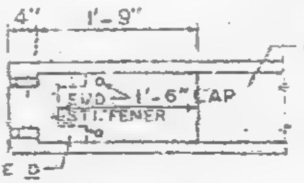


SECTION [illegible]

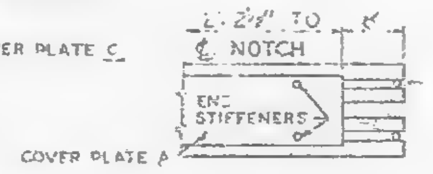


TOP VIEW - DETAIL "B"

COVER PLATES 30 GA. THICK

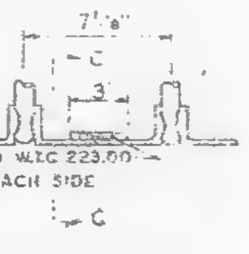


DETAIL "F"

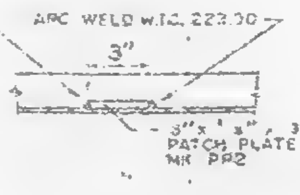


DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C"

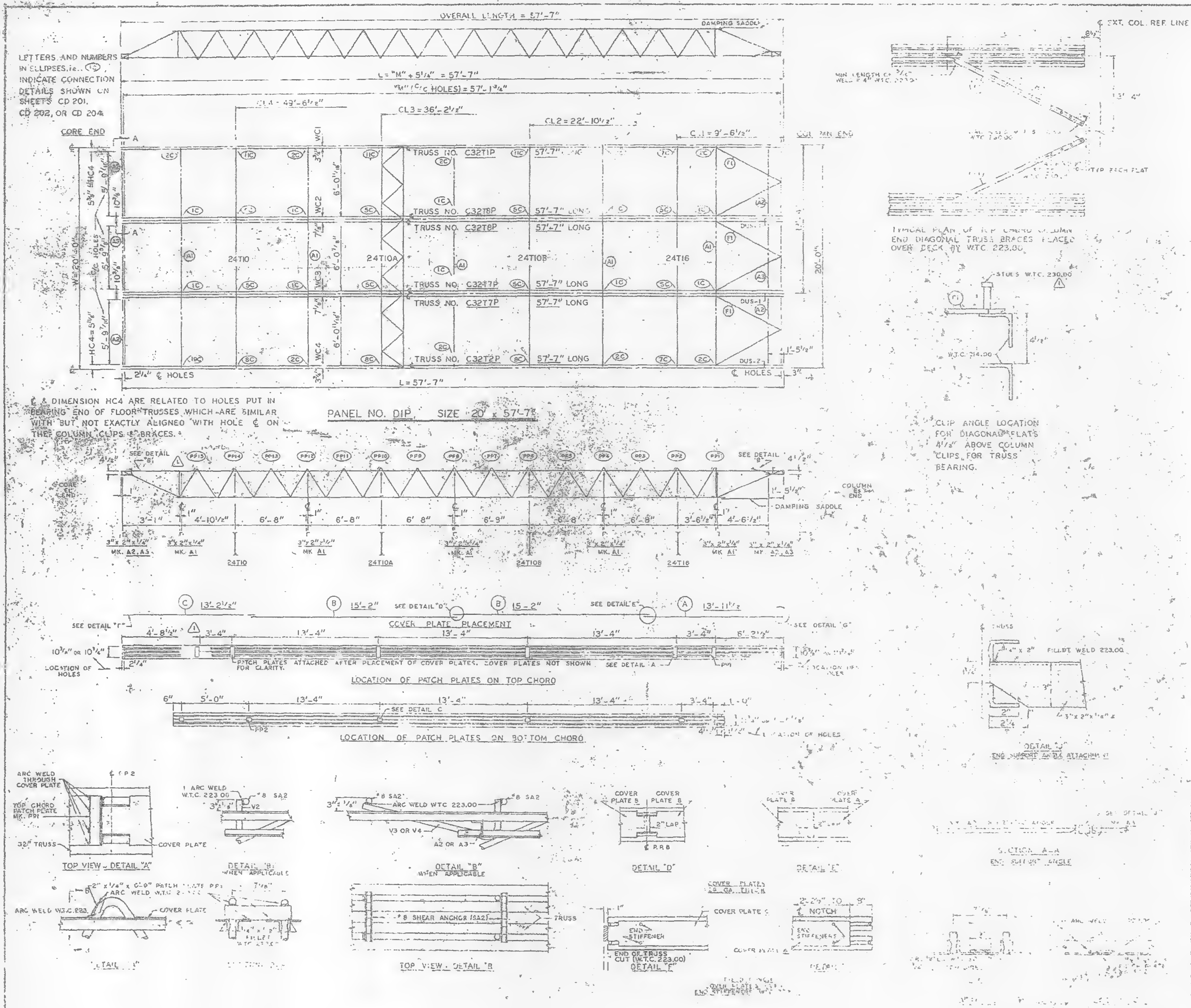


SECTION C-C

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL M 20' x 58'-3"
BLDG. B FLOORS 72-73 (WEST) △1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James Wohleber DATE 1/2/70
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE
DETAILED BY: A CARL [illegible]
DESIGN DRAWING NO. 7-AB3 10-15-68
DRAWN BY G.D.C. DATE OCT 24, 1968
CHECKED BY T.M.CHURA DATE OCT. 24, 1968
IN CHARGE OF PROD. DEV.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP. DIM


LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
OVERALL LENGTH = 57'-7"
DAMPING SADDLE
L = "M" + 5¼" = 57'-7"
"M" (℄-℄ HOLES) = 57'-1¾"
CL4 = 43'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1P 57'-7" LONG
TRUSS NO. C32T8P 57'-7" LONG
TRUSS NO. C32T6P 57'-7" LONG
TRUSS NO. C32T7P 57'-7" LONG
TRUSS NO. C32T7P 57'-7" LONG
TRUSS NO. C32T2P 57'-7" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
HC4
W = 20'-0"
20'-0"
DUS-1
DUS-2
2¼" ℄ HOLES
℄ HOLES
L = 57'-7"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIP SIZE 20' x 57'-7"
SEE DETAIL "B"
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
3'-1" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-9" 6'-8" 6'-8" 3'-6½" 4'-6½"
3"x 2"x ¼" MK. A2, A3
3"x 2"x ¼" MK. A1
DAMPING SADDLE
COLUMN END
13'-2½"
15'-2"
15'-2"
13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
COVER PLATE PLACEMENT
4'-8½" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2½"
10⅜" or 10¼"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL A
LOCATION OF PATCH PLATES ON TOP CHORD
6" 5'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"
SEE DETAIL C
PP2
LOCATION OF PATCH PLATES ON BOTTOM CHORD
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
#8 SA2
V2
DETAIL "B" WHEN APPLICABLE
ARC WELD WTC 223.00
V3 OR V4
A2 OR A3
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE B
2" LAP
℄ P.P.8
DETAIL "D"
COVER PLATE B
COVER PLATE A
DETAIL "E"
2" x 1¼" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
COVER PLATE
DETAIL "C"
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES
COVER PLATE
END STIFFENER
END OF TRUSS CUT (W.T.C. 223.00)
DETAIL "F"
NOTCH
END STIFFENER
DETAIL "G"
℄ EXT. COL. REF. LINE
3'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TRUSS
FILLET WELD 223.00
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE

| QUANTITY OF MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| [illegible] | MK | PC | SIZE | DWGS |
| FLOOR TRUSSES | [illegible]P | 1 | [illegible] 57'-7" | ST 201P |
| | 2P | 1 | C32T2P 57'-7" | ST 202P |
| | 7P | 2 | C32T7P 57'-7" | ST 202P |
| | [illegible] | [illegible] | [illegible] 57'-7 | ST [illegible]P |
| [illegible] TRUSSES | [illegible] | [illegible] | [illegible] | [illegible] |
| | 10A | 1 | [illegible] | ST 210A |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| | 16 | [illegible] | [illegible] | ST 216 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | A2 | [illegible] | [illegible] | ST 403 |
| | A3 | [illegible] | [illegible] | ST 403 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | ST 303 |
| COVER PLATES | C | 3 | 9" x .035" x 13' 7½" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-4" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x [illegible] | ST 295 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 295 |
| CONNECTION BARS | [illegible] | 6 | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] x 0'-10" | ST 400 |
| CONNECTION PLATES | [illegible] | 4 | [illegible] | ST 400 |
| | V2 | 1 | 4½" x .30" x [illegible]-5" | ST 400 |
| | [illegible] | 1 | 4½" x 30" x [illegible]-0" | ST 400 |
| | [illegible] | 3 | 6½" x [illegible] x [illegible] 8" | ST 400 |
| | PP | 1 | 4½" x .30" x 0'-9" | ST 401 |

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-10-69 | AS NOTED | G.D.C. |

⚠1 REF. DRWGS

| | |
|---|---|
| 7-AB2-5 & 1 | 7-22-68 |
| 7-AB3-9 | 10-15-68 |
| 7-AB4-31 | [illegible]-3-68 |
| 7-AB4-15, 16 & 39 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SC-124 | 1-6-69 |
| [illegible]-181-2, 3 & 4 | 7-22-68 |
| [illegible]-181-5 | [illegible]-15-66 |

[illegible] PANEL DETAILS

[illegible] CENTER [illegible]

OF

[illegible] OF NEW YORK AUTHORITY

BLDG. A [illegible] 74 (N)

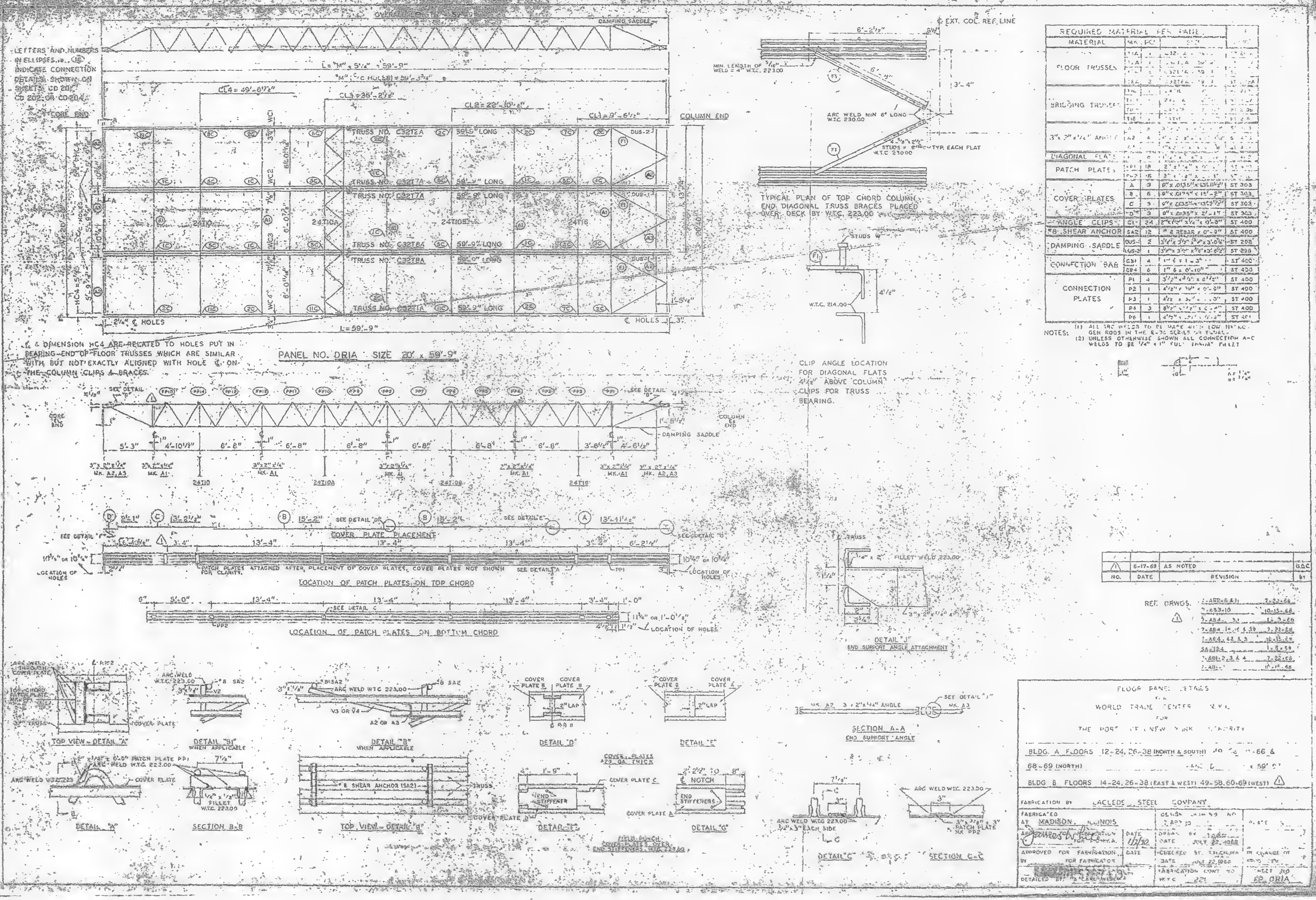
[illegible] 57'-7"

BLDG. B FLOORS 74 (WEST) ⚠1

James White 1/2/70

OCT [illegible], 1966

[illegible] DIP [illegible]



| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK. | PC. | SIZE | [illegible] |
| FLOOR TRUSSES | [illegible] | 1 | C32... | [illegible] |
| | [illegible] | 1 | [illegible] | [illegible] |
| | [illegible] | 2 | C32T7A - 59'-9" | [illegible] |
| | T8A | 2 | C32T8A - 59'-9" | ST ...A |
| BRIDGING TRUSSES | T10 | 1 | 24T10 | [illegible] |
| | T10A | [illegible] | 24T10A | [illegible] |
| | T10B | [illegible] | 24T10B | ST 2.06 |
| | T16 | [illegible] | 24T16 | [illegible] |
| 3" x 2" x ¼" ANGLES | A1 | 2 | [illegible] | [illegible] |
| | A2 | 6 | [illegible] | [illegible] |
| | A3 | [illegible] | [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | 6 | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 18 | 2" x ... | ST 400 |
| | PP2 | 6 | 3" x ... | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-3" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-0" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-0⅝" | ST 208 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6½" | ST 208 |
| CONNECTION BAR | CB1 | 4 | 1" ⌀ x 1-3" | ST 400 |
| | CB4 | 6 | 1" ⌀ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ¾" x 8½" | ST 400 |
| | P2 | 1 | 4½" x ... x 0'-9" | ST 400 |
| | P3 | 1 | 4½ x ... 0" | ST 400 |
| | P4 | 3 | 8½" x ½" x ... | ST 400 |
| | P6 | 1 | 4½" x ... | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION A-C WELDS TO BE ¼" x 1" FULL THROAT FILLET

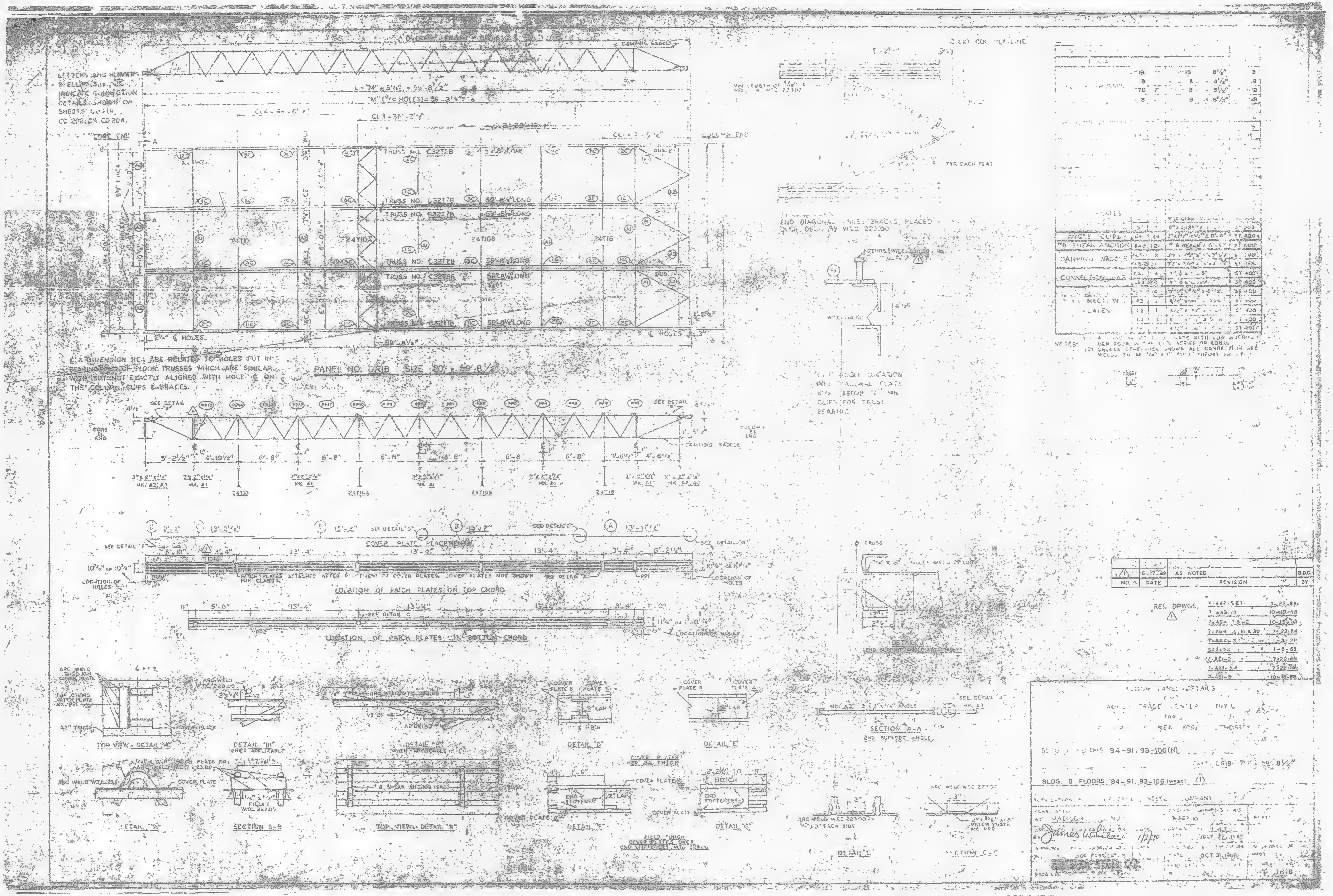
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| △1 | 6-17-69 | AS NOTED | G.D.C. |

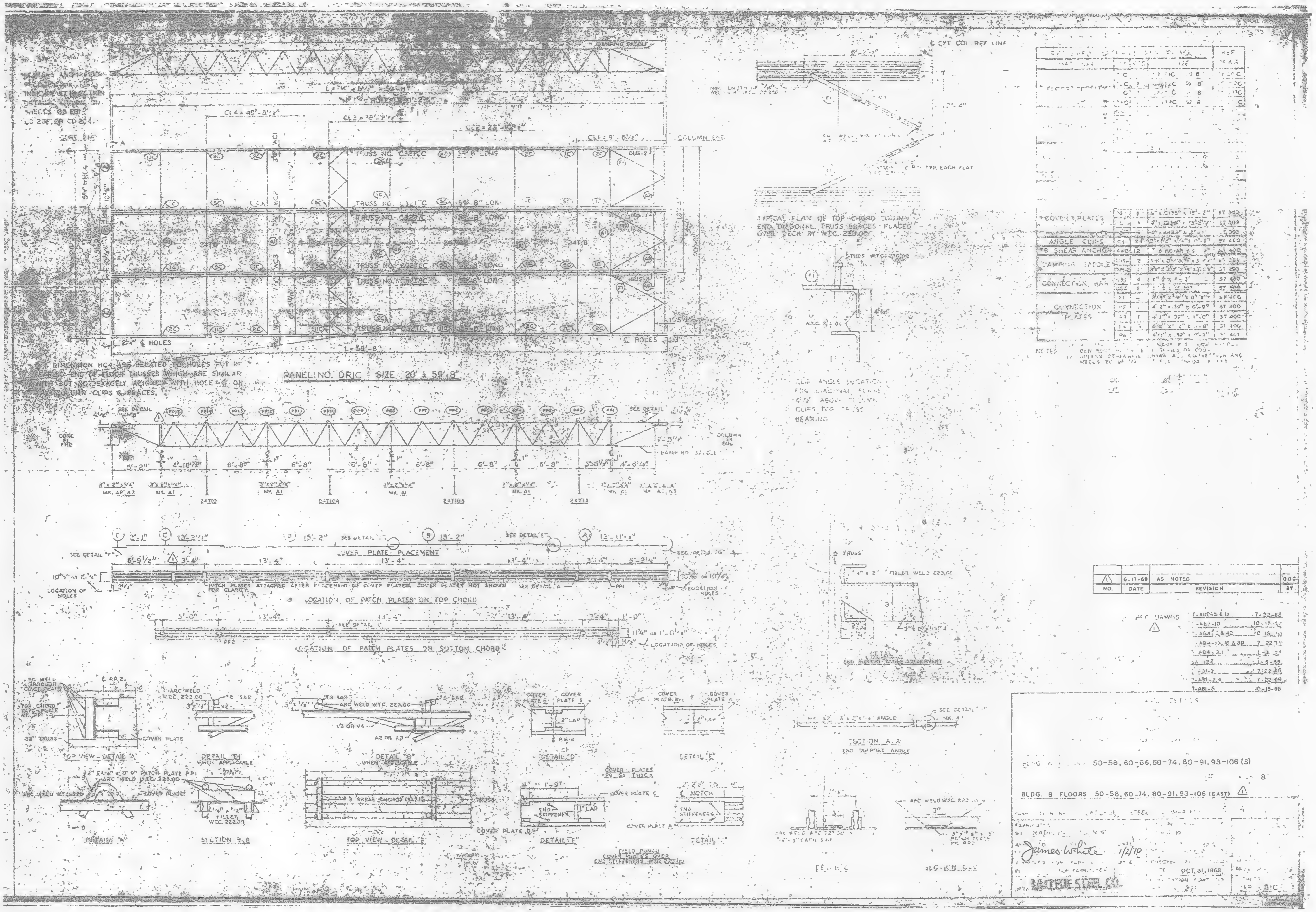
REF. DRWGS. △1
7-AB2-5 & 11 — 7-22-68
7-AB3-10 — 10-15-68
7-AB4-3.1 — 1-3-68
7-AB4-15, 16 & 33 — 7-22-68
7-AB4-48 & 3 — 10-15-68
SA-124 — 1-3-59
7-AB1-2, 3 & 4 — 7-22-68
7-AB1- — 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66 &
68-69 (NORTH) PANEL D... x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST) △1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.O.N.Y.A. James White DATE 1/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY: A. CARL WESCH
DESIGN DRAWING NO. 7-AB2-10
DRAWN BY [illegible] DATE JULY 22, 1968
CHECKED BY [illegible] DATE JULY 22, 1968
FABRICATION CONT. NO. W.T.C. 221
IN CHARGE OF [illegible]
SHEET NO. FP DRIA


OVERALL LENGTH
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, 203, CD 204.
L = "M" + 5¼" = 59'-8½"
"M" (C/C HOLES) = 59'-3¼"
CL 3 = 36'-2"
CORE END
COLUMN END
TRUSS NO. C32T2B
TRUSS NO. C32T7B 59'-8½" LONG
TRUSS NO. C32T7B 59'-8½" LONG
TRUSS NO. C32T2B 59'-8½" LONG
TRUSS NO. C32T8B 59'-8½" LONG
TRUSS NO. C32T1B 59'-8½" LONG
24T10
24T10A
24T108
24T16
2¼" ℄ HOLES
℄ HOLES
L = 59'-8½"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIB SIZE 20' x 59'-8½"
SEE DETAIL "B"
SEE DETAIL
CORE END
COLUMN END
DAMPING SADDLE
5'-2½"
4'-10½"
6'-8"
3'-6½"
4'-6½"
MK. A2, A3
MK. A1
24T10
24T16
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "G"
2'-1"
13'-2½"
15'-2"
13'-11½"
6'-10"
3'-4"
13'-4"
6'-2½"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL C
LOCATION OF PATCH PLATES IN BOTTOM CHORD
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "D"
DETAIL "E"
ARC WELD W.T.C. 223
DETAIL "A"
FILLET W.T.C. 223.00
SECTION B-B
8 SHEAR ANCHOR
TOP VIEW - DETAIL "B"
COVER PLATES 20 GA. THICK
END STIFFENER
½" LAP
DETAIL "F"
℄ NOTCH
END STIFFENERS
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
END DIAGONAL TRUSS BRACES PLACED AFTER ERECTION W.T.C. 223.00
TYP. EACH FLAT
STUDS W.T.C. 30.00
FILLET WELD
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
MK. A2 3" x 2" x ¼" ANGLE
SEE DETAIL "J"
ARC WELD W.T.C. 223.00
3" EACH SIDE
DETAIL "C"
PATCH PLATE
SECTION C-C
TRUSSES
PLATES
ANGLE CLIPS
SHEAR ANCHOR
DAMPING SADDLE
CONNECTION
PLATES
NOTES:
⚠ 6-17-69 AS NOTED G.D.C.
NO. DATE REVISION BY
REF. DRWGS. ⚠
7-A8P-5 & 1 7-22-68
7-A53-10 10-19-68
7-A84-7 & 42 10-15-68
7-A84-6, 16 & 39 7-22-68
7-A84-31 1-3-69
5321-24 1-6-69
7-A81-2 7-22-68
7-A81-3, 4 7-22-68
7-A81-5 10-15-68
FLOOR PANEL DETAILS
TRADE CENTER N.Y.C.
FOR
NEW YORK AUTHORITY
BLDG. FLOORS 84-91, 93-106 (N)
DRIB 20' x 59'-8½"
BLDG. B FLOORS 84-91, 93-106 (WEST) ⚠
STEEL COMPANY
AT MADISON
BY James White 1/2/70
DATE OCT. 31, 1968
DRIB



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-17-69 | AS NOTED | G.D.C. |

REF. DRWGS 1

| | |
|---|---|
| 7-AB2-5 & 10 | 7-22-68 |
| 7-AB3-10 | 10-15-68 |
| 7-AB4-3 & 42 | 10-15-68 |
| 7-AB4-10, 16 & 39 | 7-22-68 |
| 7-AB4-3.1 | 1-3-69 |
| 7-A 122 | 1-5-69 |
| 7-A31-3 | 7-22-68 |
| 7-AB1-3, 4 | 7-22-68 |
| 7-AB1-5 | 10-15-68 |

50-58, 60-66, 68-74, 80-91, 93-106 (S)

8

BLDG. 8 FLOORS 50-58, 60-74, 80-91, 93-106 (EAST) 1

AT MADISON

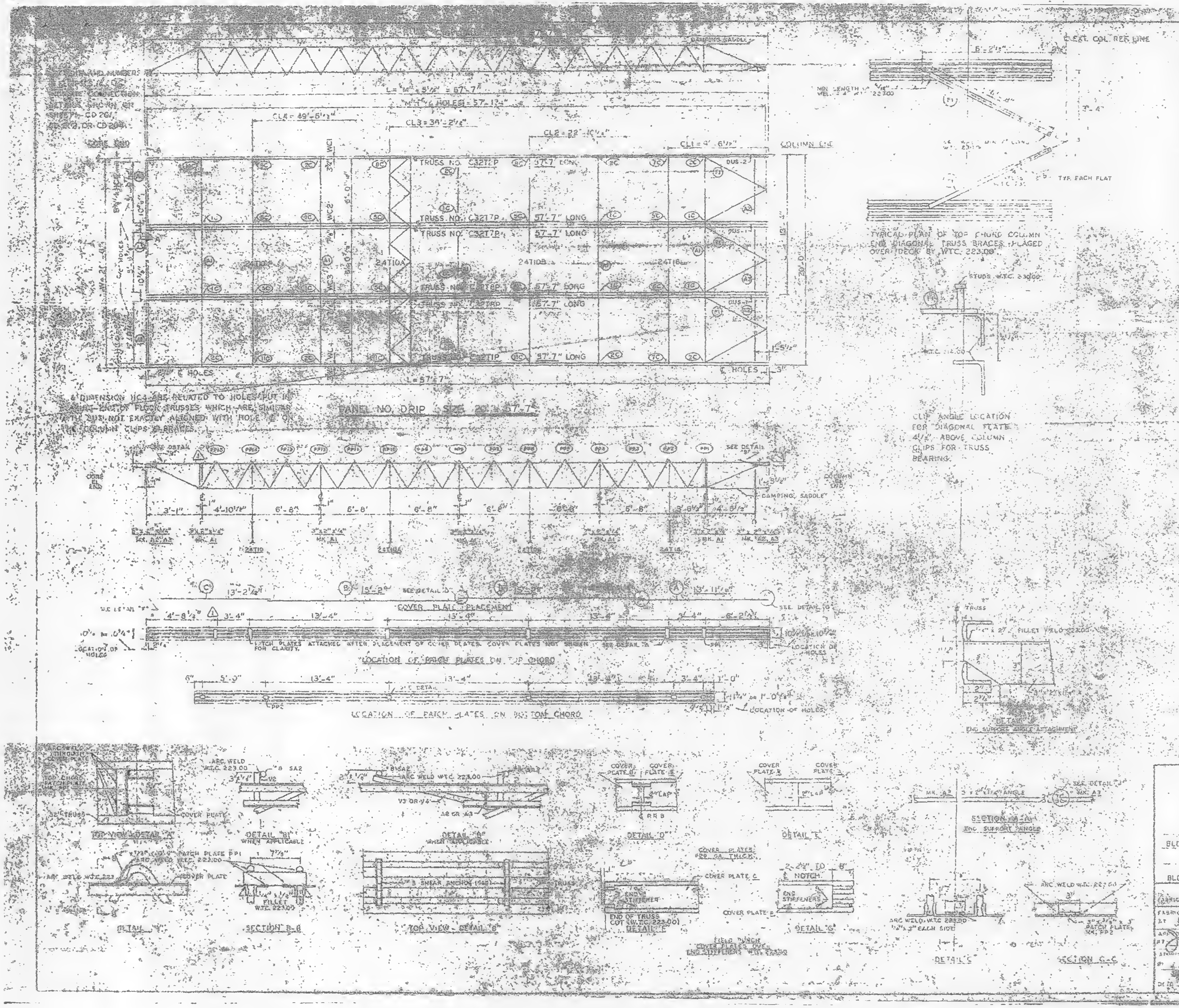
10

James White 1/2/70

OCT. 31, 1968

PACIFIC STEEL CO.

DR1C


DAMPING SADDLE
L = "M" + 8½" = 57'-7"
"M" 1¼" HOLES = 57'-1¾"
CL4 = 49'-6¼"
CL3 = 38'-2½"
CL2 = 22'-10¼"
CL1 = 9'-6½"
COLUMN C/L
CORE END
TRUSS NO. C3212P 57'-7" LONG
TRUSS NO. C3217P 57'-7" LONG
2471OA
2471OB
24716
L = 57'-7"
℄ HOLES
℄ DIMENSION "C4" ARE RELATED TO HOLES PUT IN EXTERIOR END OF FLOOR TRUSSES WHICH ARE SIMILAR TO BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIP SIZE 20' x 57'-7"
SEE DETAIL
COLUMN END
DAMPING SADDLE
3'-1" 4'-10⅞" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 5'-8" 3'-8½" 4'-8½"
13'-2¼" 13'-2" 13'-11¾"
COVER PLATE PLACEMENT
4'-8½" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2¼"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF HOLES
6" 5'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
EXT. COL. REF. LINE
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL PLATE 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
FILLET WELD 223.00
DETAIL END SUPPORT ANGLE ATTACHMENT
TOP VIEW DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
SECTION A-A END SUPPORT ANGLE
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR
COVER PLATES 22 GA. THICK
END STIFFENERS
END OF TRUSS COT W.T.C. 223.00
DETAIL "F"
NOTCH
DETAIL "G"
FIELD PUNCH COVER PLATES OVE END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 ½" x 3" EACH SIDE
DETAIL "C"
SECTION C-C

| MATERIAL | MK. | NO. | SIZE | REF. DWG. |
|---|---|---|---|---|
| FLOOR TRUSSES | 1P | [illegible] | C321P 57'-7 | ST 201P |
|  | [illegible] | 1 | C321P 57'-7" | ST 202P |
|  | [illegible] | 2 | C321P - 57'-7" | ST 207P |
|  | [illegible] | 2 | C321P 57'-7 | ST 206P |
| [illegible] | [illegible] | 1 | 24710 [illegible] | ST 210 |
|  | [illegible] | 1 | 24710A [illegible] | ST 210A |
|  | [illegible] |  | 24 [illegible] | ST 210B |
|  | [illegible] |  | 24 [illegible] | ST 216 |
| [illegible] | A1 | 5 | 3" x 2" x ¼" x 16'-11 | ST 403 |
|  | A2 | 4 | 3" x 2" x ¼" x [illegible] | ST 403 |
|  | A3 | [illegible] | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| [illegible] | [illegible] | 6 | [illegible] | ST 403 |
| [illegible] | [illegible] | 18 | 2" x ¼" x 0'-2 | ST 400 |
|  | [illegible] | 15 | 3" x ¼" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-[illegible] | ST 303 |
|  | B | 6 | 9" x .0135" x 13'-2" | ST 303 |
|  | C | 9 | 9" x .0135" x 13'-[illegible] | [illegible] |
| ANGLE CLIPS | C1 | 26 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 RE-BAR x 0'-3" | ST 400 |
| DAMPING SADDLE | DS-1 | 2 | 3½" x 3½" x [illegible] x 3'-0" | ST 298 |
|  | DS-2 | 1 | 3½" x 2½" x [illegible] x 3'-0" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-9" | ST 400 |
|  | CB2 | 6 | 1" ϕ x 2'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ¼" x 5½" | ST 400 |
|  | P2 | 1 | 4½" x .38" x 0'-9" | ST 400 |
|  | P3 | 1 | 4½" x .38" x 1'-0" | ST 400 |
|  | P4 | 3 | 3½" x [illegible] x 0'-8" | ST 400 |
|  | P6 | 1 | 4½" x .38" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN ROD IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

| NO. | DATE | REVISION | BY |
|---|---|---|---|
|  |  |  |  |
|  |  |  |  |
| ⚠1 | 6-17-69 | AS NOTED | G.S.C. |

REF. DRWGS. ⚠1

| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-10 | 10-[illegible] |
| 7-A84-3 & 42 | 10-15-[illegible] |
| 7-A83-15, 16 & 39 | 7-22-68 |
| 7-A83-3.1 | 1-3-[illegible] |
| A-124 | 1-6-69 |
| 7-A81-2 | 7-22-68 |
| 7-A81-3, 4 | 7-22-68 |
| 7-A81-5 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

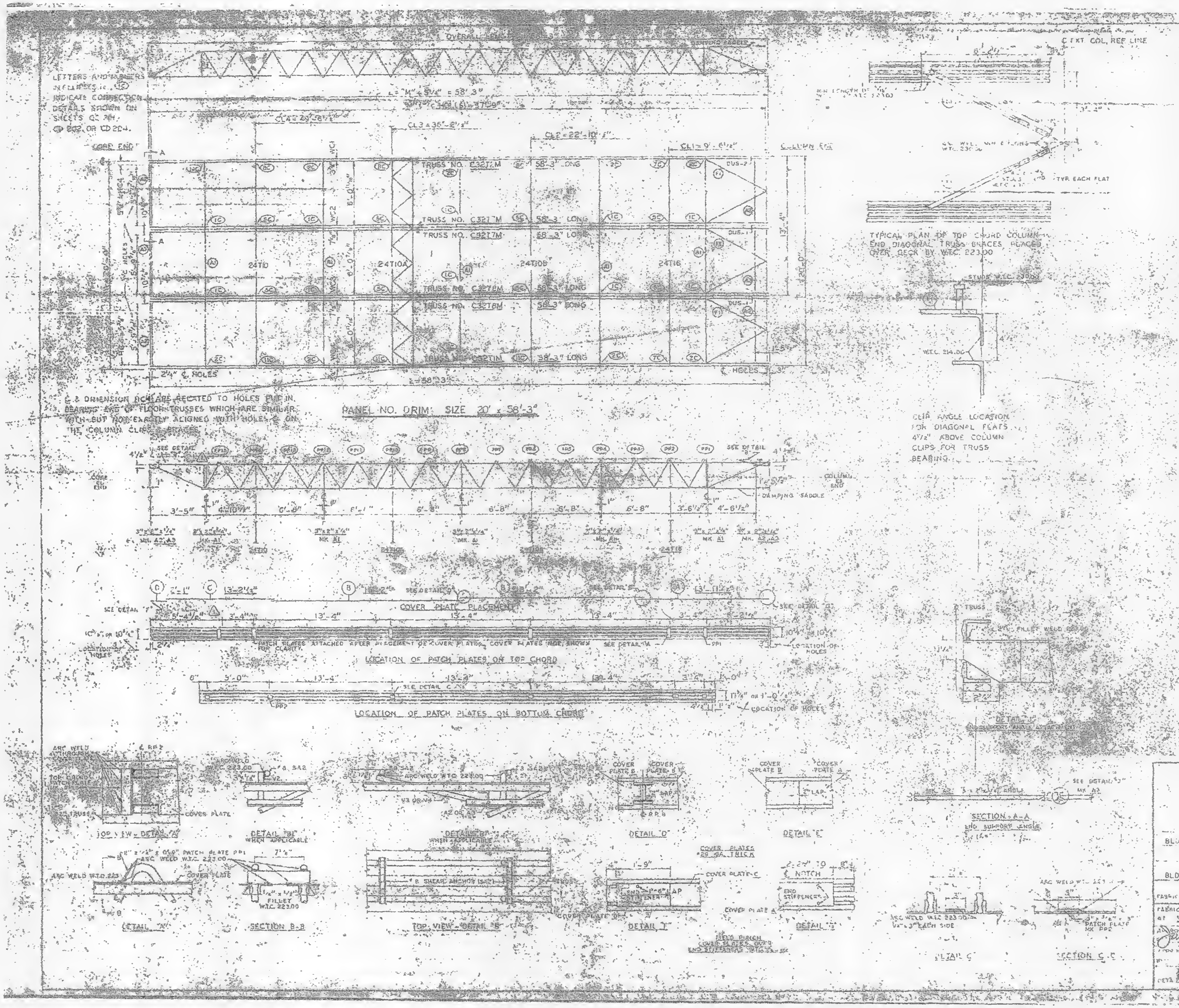
BLDG. A FLOORS 74 (N)

PANEL 2 20' x 57'-7

BLDG. B FLOORS 74 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A82
APPROVED FOR FABRICATION BY James White
DATE 1/2/70
DRAWN BY [illegible]
CHECKED BY [illegible]
DATE OCT. 31, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR
DETAILED BY [illegible] WEBER
FABRICATION CONT. NO. 221
DRIP


LETTERS AND NUMBERS ENCLOSED IN (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.
CORE END
TRUSS NO. C32T2M 58'-3" LONG
TRUSS NO. C32T1M 58'-3" LONG
TRUSS NO. C32T7M 58'-3" LONG
TRUSS NO. C32T6M 58'-3" LONG
TRUSS NO. C32T1N 58'-3" LONG
24T10
24T10A
24T10B
24T16
DUS-2
DUS-1
COLUMN END
C HOLES
C & DIMENSION INDICATE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES C ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIM SIZE 20' x 58'-3"
SEE DETAIL
DAMPING SADDLE
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
C EXT. COL. REF LINE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
TYP. EACH FLAT
STUDS W.T.C. 300
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL END SUPPORT ANGLE ATTACHMENT
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
SECTION A-A END SUPPORT ANGLE
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
DETAIL C
SECTION C-C
ARC WELD W.T.C. 223.00
COVER PLATE
#8 SHEAR ANCHOR (SA2)
COVER PLATES 10 GA. THICK
NOTCH
END STIFFENER
COVER PLATE A

| [illegible] | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | | | | |
| [illegible] | M | | M [illegible]8'-3" | ST 20[illegible]M |
| | M | | M [illegible]8'-3" | ST [illegible]M |
| | M | | M [illegible]8'-3" | ST 20[illegible]M |
| | [illegible]M | | [illegible]M 58'-3" | ST 20[illegible]M |
| [illegible] | | | [illegible] | ST [illegible] |
| | | | [illegible] | ST 403 |
| | | | [illegible] | ST 403 |
| | | | [illegible] | ST 403 |
| [illegible] | | | [illegible] | ST 403 |
| [illegible] | | | [illegible] | ST 400 |
| | | | [illegible] | ST 400 |
| | | | [illegible] | ST 303 |
| COVER PLATES | P[illegible] | 6 | [illegible] x .435" x 13'-[illegible] | ST 303 |
| | [illegible] | 2 | 9" x .435" x 13'-2½" | ST 303 |
| | [illegible] | 2 | 9" x .435" x [illegible] | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 2½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x [illegible] | ST 203 |
| | DUS-2 | 4 | 3½" x 2½" x ⅜" x 3'-0¾" | ST 203 |
| CONNECTION BAR | C2 | 4 | 1" Φ x [illegible] 3" | ST 400 |
| | CB4 | 8 | 1" Φ x 0'-0" | ST 400 |
| CONNECTION PLATES | P | 4 | 3½" x 4" x 0'-3" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-0" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x .39" x 0'-9" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS W/ THE E 70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION AND WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ½"
B = ½"

| | | | |
|---|---|---|---|
| | | | |
| | | | |
| 1 | 6-17-69 | AS NOTED | G.D.C. |
| NO. | DATE | REVISION | BY |

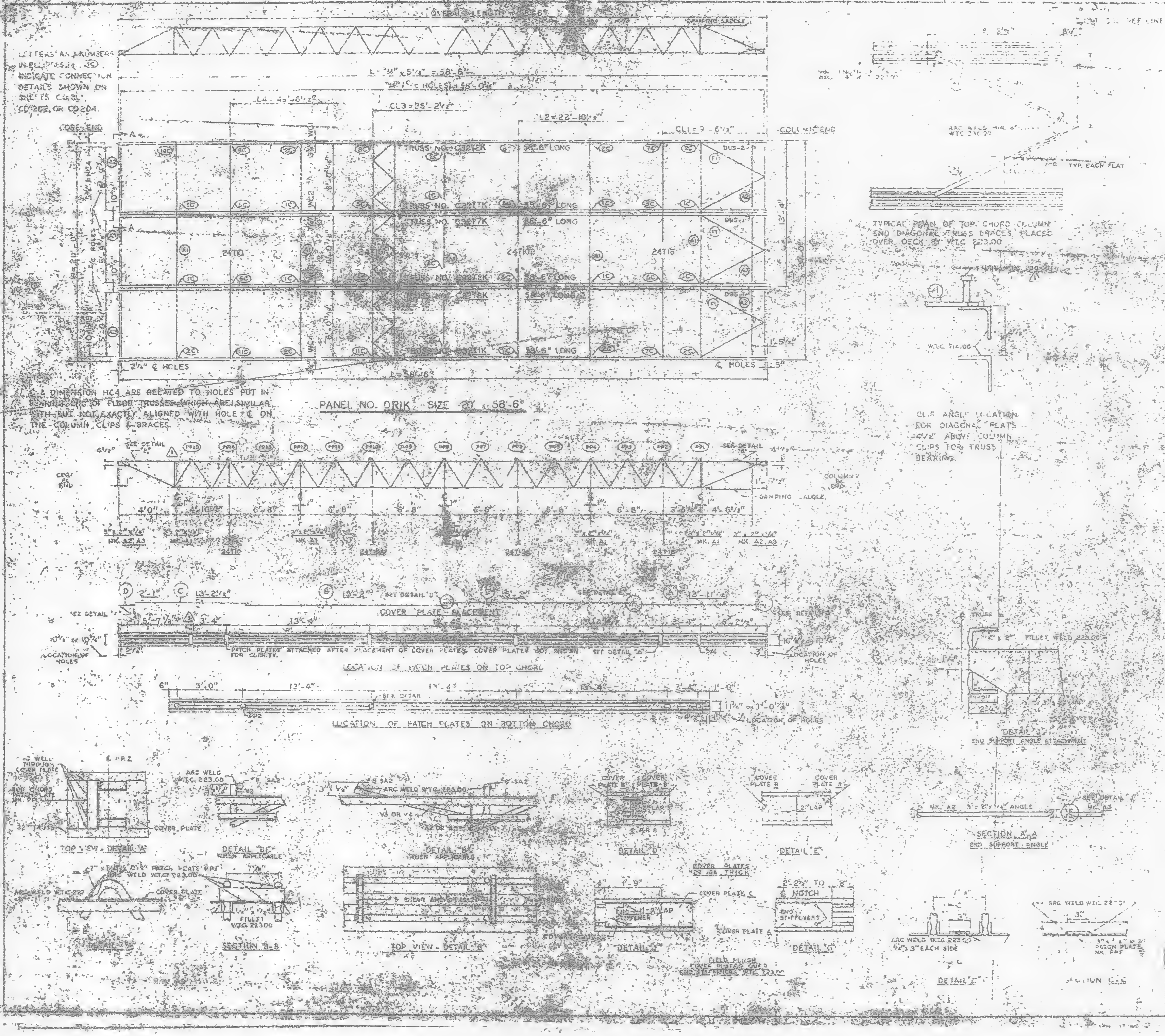
REF. DRWGS 1

| | |
|---|---|
| 7-A32-5 & 11 | 7-22-68 |
| 7-AB3-10 | 10-15-68 |
| 7-AB8-3 & 42 | 10-15-68 |
| 7-AB4-15, 16 & 39 | 7-22-68 |
| 7-AB4-3.1 | 1-3-68 |
| SA-124 | 1-6-69 |
| 7-AB1-2 | 7-22-68 |
| 7-AB1-3, 4 | 7-22-68 |
| 7-AB1-5 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL DRIM 20' x 58'-3"
BLDG. B FLOORS 72-73 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION James White DATE 1/8/70
APPROVED FOR FABRICATION DATE
BY FOR FABRICATION
DESIGN DRAWING NO. 7-AB1-10
DRAWN BY [illegible] DATE JULY 22, 1968
CHECKED BY [illegible] DATE OCT 31, 1968
FABRICATION CONT. NO. 221
DETAIL DRWG. DRIM


OVERALL LENGTH 58'-6"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, I.E. (3C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD-201, CD-202, OR CD-204.
L="M" + 5'-4" = 58'-6"
"M" (℄ HOLES) = 58'-0"
L4 = 45'-6½"
CL3 = 35'-2½"
L2 = 22'-10½"
CL1 = 3'-6½"
CORE END
COLUMN END
TRUSS NO. C3271K 58'-6" LONG
TRUSS NO. C3277K 58'-6" LONG
TRUSS NO. C3278K 58'-6" LONG
TRUSS NO. C3271K 58'-6" LONG
24T10
24T15
DUS-2
13'-4"
1'-5"
2¼" ℄ HOLES
℄ HOLES
L = 58'-6"
A-A DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIK SIZE 20' x 58'-6"
SEE DETAIL
CORE END
COLUMN END
DAMPING SADDLE
4'-0"
6'-8"
3'-6¾"
4'-6½"
MK. A2, A3
MK. A1
MK. A2, A3
2'-1"
13'-2½"
13'-2"
13'-1½"
SEE DETAIL "D"
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
5'-0"
13'-4"
SEE DETAIL
PP2
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
ARC WELD MIN. 6" W.T.C. 223.00
TYP. EACH FLAT
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL PLATS ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TRUSS
FILLET WELD 223.00
DETAIL "3"
END SUPPORT ANGLE ATTACHMENT
MK. A2
ANGLE
SEE DETAIL
SECTION A-A
END SUPPORT ANGLE
ARC WELD W.T.C. 223.00
TOP VIEW - DETAIL "A"
COVER PLATE
DETAIL "BC" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
SA2
V3 OR V4
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE A
DETAIL "D"
DETAIL "E"
COVER PLATES 29 GA. THICK
COVER PLATE C
COVER PLATE A
PATCH PLATE PP1
ARC WELD W.T.C. 223.00
FILLET W.T.C. 223.00
SECTION B-B
SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
11-3" LAP
STIFFENER
DETAIL "F"
2'-2½" TO ℄ NOTCH
END STIFFENERS
DETAIL "G"
FIELD PLUGH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 ½" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
PATCH PLATE MK. PP2
SECTION C-C

| | | | |
|---|---|---|---|
| COVER PLATES | C | 3 | 8" x .0135" x 13'-1" | ST 303 |
| | D | 3 | 8" x .0135" x 2' | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ⅛" x 0'-... | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | ST 205 |
| | DUS-2 | 1 | [illegible] | ST 200 |
| CONNECTION BAR | CB1 | 4 | [illegible] | ST 400 |
| | CB4 | 8 | [illegible] | ST 400 |
| CONNECTION PLATES | P1 | 4 | [illegible] | ST 400 |
| | P2 | 1 | 4½" x 39⁄... x 0'-6" | ST 400 |
| | P3 | 1 | 4½" x ... x ...0" | ST 400 |
| | P4 | 3 | 6½" x ... | ST 400 |
| | P5 | 1 | 4½" x .30" x 0'-... | ST 400 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| 1 | 6-17-69 | AS NOTED | G.D.C. |

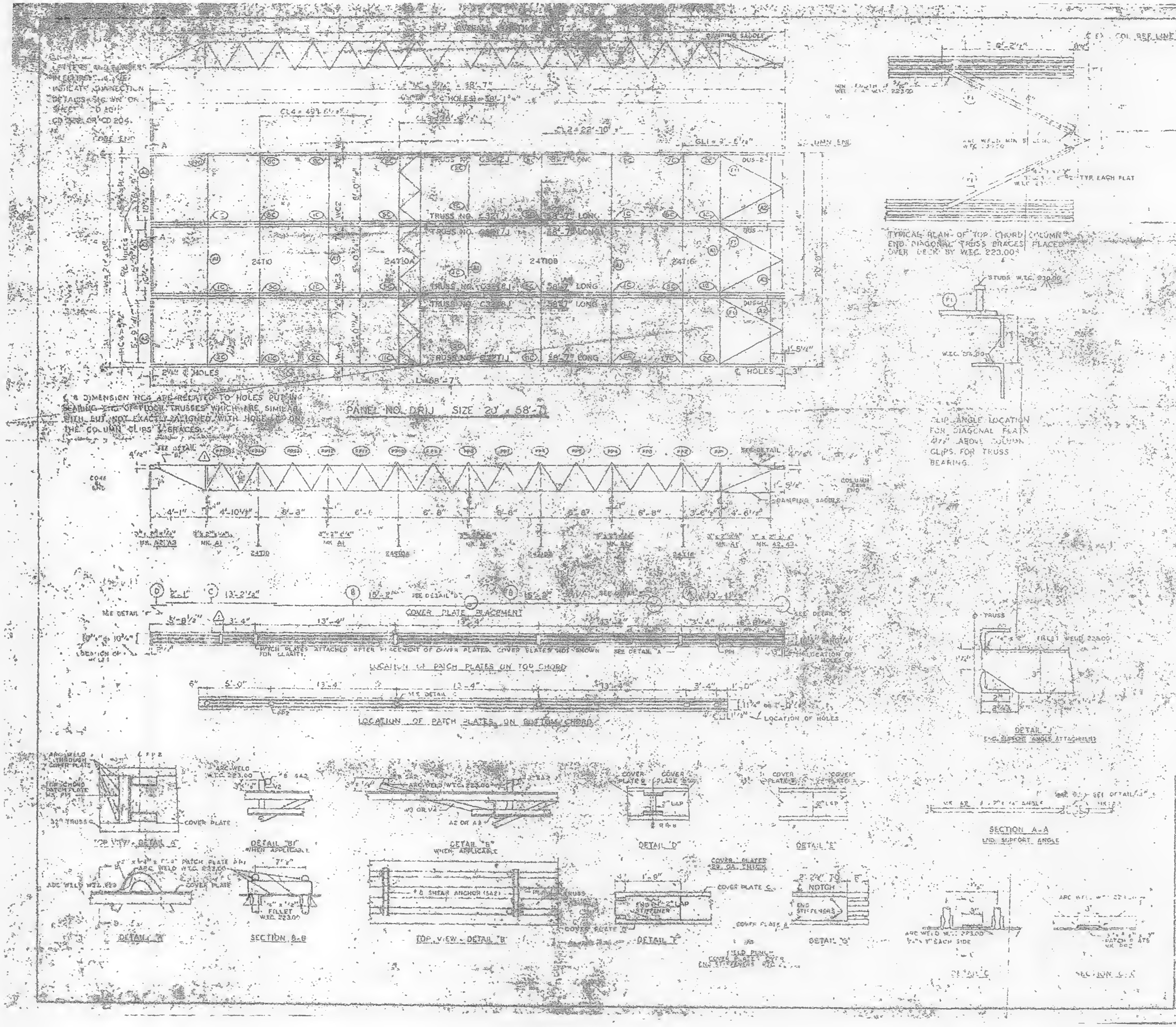
1 REF DRWGS.

| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-10 | 10-15-68 |
| 7-AB4-3 & 42 | 10-15-68 |
| 7-AB4-15, 16 & 39 | 7-22-68 |
| 3-AB4-3.1 | 1-3-69 |
| SA 124 | 1-6-69 |
| 7-AB1-2 | 7-22-68 |
| 7-AB1-3, 4 | 7-22-68 |
| 7-AB1-5 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-46(N)
8 6
BLDG. B FLOORS 45-46 (WEST) 1

FABRICATION BY ... STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James White DATE 1/2/70
APPROVED FOR FABRICATION BY
DESIGN DRAWING NO. 7-AB3-10
DRAWN BY
DATE JULY 23, 1968
CHECKED BY G.W. CHUBB
DATE OCT. 31, 1968
FABRICATION CONTRACT NO. 221
DRIK



LETTERS & NUMBERS IN CIRCLES INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.
CORE END
CL4 = 49'-6¼"
CL2 = 22'-10"
GL1 = 3'-5½"
COLUMN END
TRUSS NO. C32-2J 58'-7" LONG
TRUSS NO. C32-7J 58'-7" LONG
TRUSS NO. C32-1J 58'-7" LONG
TRUSS NO. C32-7J 58'-7" LONG
24T10
24T10A
24T10B
24T16
WC2
WC3
DUS-1
DUS-2
2¼" ℄ HOLES
℄ HOLES
L = 58'-7"
℄ & DIMENSION NCG ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIJ SIZE 20' x 58'-7"
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
4'-1"
4'-10½"
8'-8"
6'-6"
6'-8"
8'-6"
8'-8"
6'-8"
3'-6½"
4'-6"
COVER PLATE PLACEMENT
13'-2½"
15'-2"
SEE DETAIL "D"
SEE DETAIL "E"
5'-8½"
3'-4"
13'-4"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL A
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
5'-0"
13'-4"
3'-4"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
ARC WELD THROUGH COVER PLATE
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "A"
SECTION B-B
FILLET W.T.C. 223.00
#8 SHEAR ANCHOR (542)
TOP VIEW - DETAIL "B"
COVER PLATE B
COVER PLATE C
2" LAP
DETAIL "D"
DETAIL "E"
END OF 2" LAP STIFFENER
DETAIL "F"
2'-2½" TO ℄ NOTCH
END STIFFENERS
DETAIL "G"
COVER PLATE 28 GA. THICK
FIELD PUNCH COVER PLATES AT END STIFFENERS
ARC WELD W.T.C. 223.00 EACH SIDE
DETAIL "C"
SECTION C-C
SECTION A-A
END SUPPORT ANGLE
TRUSS
FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
℄ EXT. COL. REF. LINE
8'-2½"
ARC WELD MIN 5" LONG W.T.C. 223.00
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END. DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 224.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

|  |  |  |  |  |
|---|---|---|---|---|
| FLOOR TRUSS | J | [illegible] | J 58'-7" | [illegible] J |
|  | J | [illegible] | J 58'-7" | [illegible] J |
|  | 7J | [illegible] | J 58'-7" | [illegible] J |
|  | J | [illegible] | J 58'-7" | [illegible] J |
| COVER PLATES | [illegible] | 3 | [illegible] | [illegible] |
|  | [illegible] | 3 | [illegible] | [illegible] |
| ANGLE CLIPS | C1 | 24 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | 542 | 9 | [illegible] REBAR [illegible] | [illegible] |
| DAMPING SADDLE | DUS-1 | [illegible] | [illegible] | ST 298 |
|  | DUS-2 | 1 | [illegible] | ST 299 |
| CONNECTION BAR | CH1 | 6 | [illegible] | ST 400 |
|  | [illegible] | 6 | [illegible] x 0'-10" | ST 400 |
| CONNECTION PLATES | [illegible] | 4 | [illegible] | ST 400 |
|  | P2 | 1 | [illegible] | ST 400 |
|  | P3 | 1 | [illegible] | ST 400 |
|  | P4 | 3 | [illegible] | ST 400 |
|  | P6 | 1 | [illegible] | ST 401 |

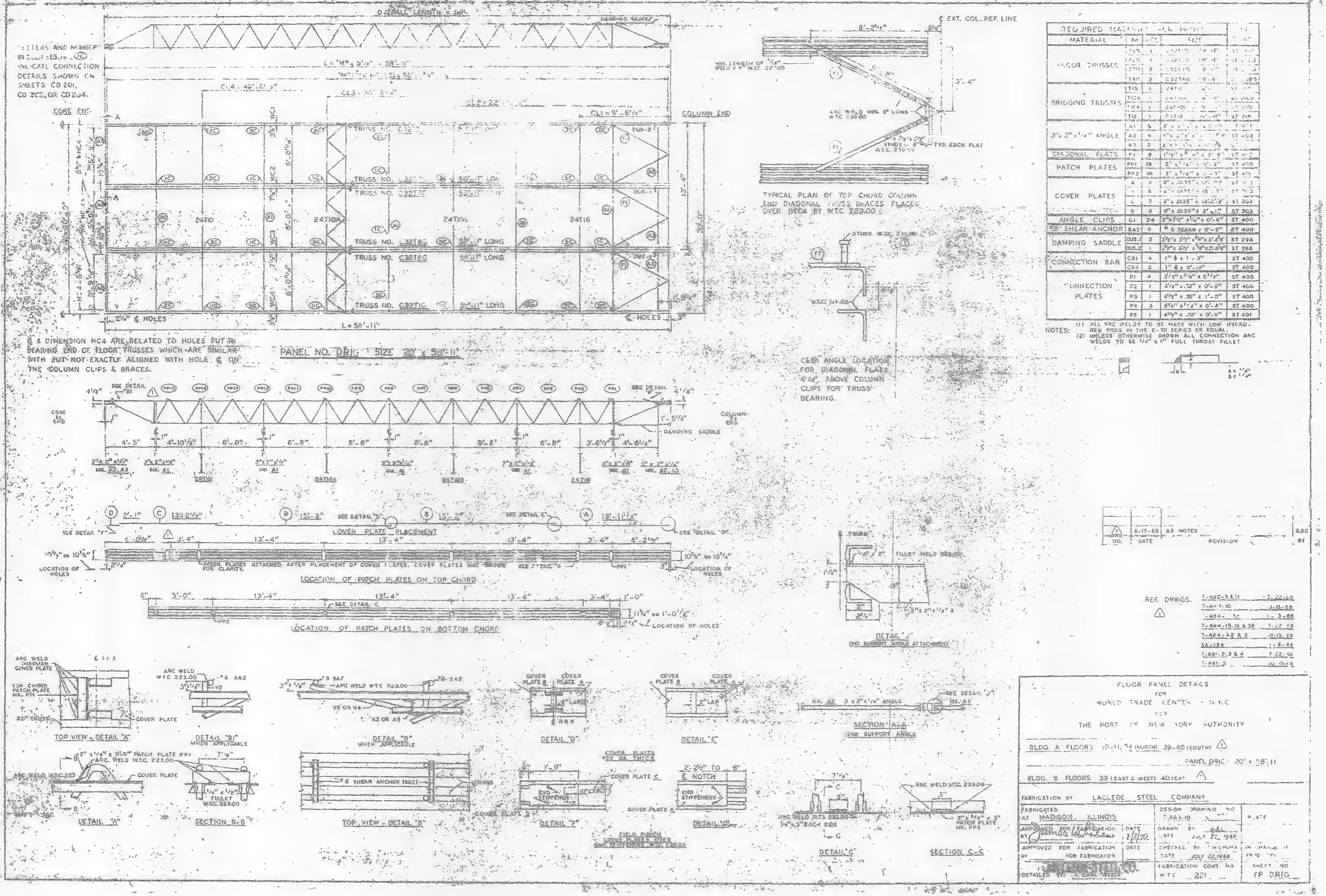
NOTES: (1) ALL ARC WELDS [illegible] ROUS [illegible] THE [illegible] ON EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE [illegible] FULL [illegible] FILLET

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-17-69 | AS NOTED | D.C.C. |

REF DWGS. △1
7-A87-5 & 11 — 7-22-68
7-A84-10 — 10-15-68
7-A84-1 & 42 — 10-15-68
7-A84-5, 10 & 39 — 7-22-68
7-A84-3.1 — 1-3-69
[illegible] — 1-6-69
7-A81-2 — 7-22-68
7-A81-3, 4 — 7-22-68
7-A81-5 — 10-15-68

40 (N)
58'-7
BLDG. 8 FLOORS 40 (WEST) △1

[illegible] STEEL COMPANY
AT MADISON, ILLINOIS
James White 1/2/70
DATE JULY 22, 1968
DATE OCT. 31, 1968
DETAILED [illegible]
DRIJ



LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 203, OR CD 204.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | [illegible] |
| FLOOR TRUSSES | [illegible] | 1 | [illegible] 58'-11" | [illegible] |
| | [illegible] | 1 | C32T[illegible]G 58'-11" | ST [illegible] |
| | T7G | 2 | C32T7G 58'-11" | [illegible] |
| | T8G | 2 | C32T8G 58'-11" | [illegible] |
| BRIDGING TRUSSES | T10 | 1 | 24T10 [illegible] | ST 210 |
| | T10A | 1 | 24T10A [illegible] | ST 210A |
| | T10B | 1 | 24T10B [illegible] | ST 210B |
| | T16 | 1 | 24T16 [illegible]'-11" | ST 216 |
| 3"x 2"x ¼" ANGLE | A1 | 5 | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | 2 | [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | 6 | 1½" x [illegible] x 3'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-3" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 401 |
| COVER PLATES | A | 3 | 9" x .0135" x 12'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2"x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½"x 3½" x ⅛" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" φ x 1'-3" | ST 400 |
| | CB4 | 5 | 1" φ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .30" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P5 | 1 | 4½" x .30" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-17-69 | AS NOTED | G.D.C |

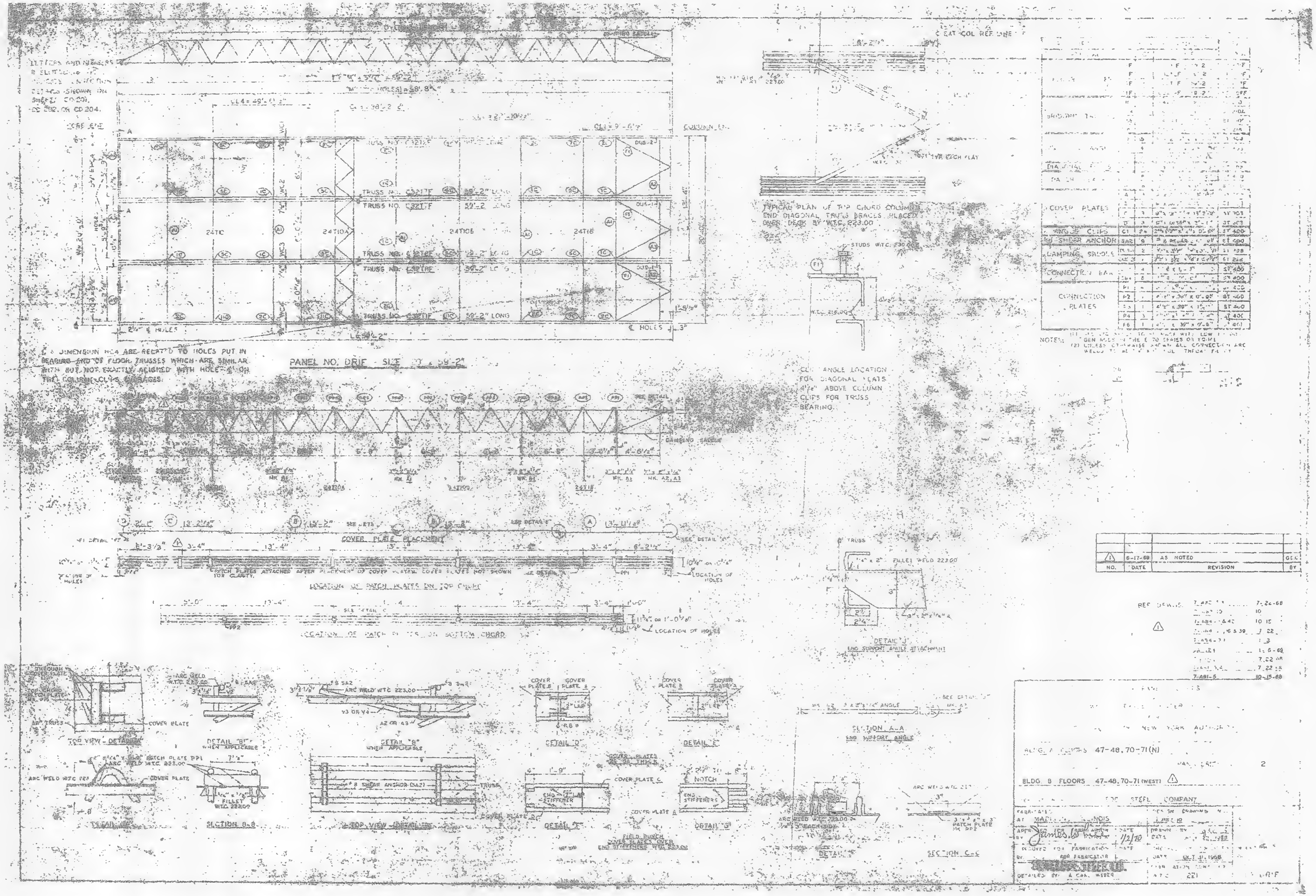
REF. DRWGS. ⚠1

| | |
|---|---|
| 7-AB2-5 & 11 | 2-22-68 |
| 7-AB3-10 | 10-15-68 |
| 7-AB4-31 | 1-3-68 |
| 7-AB4-15, 16 & 39 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB1-2, 3 & 4 | 7-22-56 |
| 7-AB1-5 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11, 39 (NORTH) 39-40 (SOUTH) ⚠1
PANEL DRIG - 20' x 58'-11
BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. DATE 1/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO 7-AB3-10
DRAWN BY adc DATE JULY 22, 1968
CHECKED BY T.M. CHURA DATE JULY 22, 1968
FABRICATION CONT NO W.T.C. 221
PLATE
IN CHARGE OF [illegible]
SHEET NO FP DRIG



LETTERS AND NUMBERS ... SHOWN ON SHEET CD 201, CD 202, OR CD 204.
CORE SIDE
LL4 = 49'-0 2"
COLUMN CL
TRUSS NO. C321TF 59'-2" LONG
TRUSS NO. C321TF 59'-2" LONG
TRUSS NO. C321FE 59'-2" LONG
24T10
24T10A
24T10B
24T16
2¼" HOLES
℄ HOLES
LL = 59'-2"
PANEL NO. DRIF - SIZE 20' x 59'-2"
CLAMPING SADDLE
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL PLATES 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL
DETAIL "B" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
COVER PLATE
ARC WELD W.T.C. 223.00
SECTION B-B
TOP VIEW - DETAIL
DETAIL "F"
DETAIL "G"
END STIFFENERS
NOTCH
FIELD PUNCH COVER PLATES OVER END STIFFENERS
SECTION C-C
COVER PLATES
ANGLE CLIPS
SHEAR ANCHOR
CLAMPING SADDLE
CONNECTION BAR
CONNECTION PLATES

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS OVERAGES.

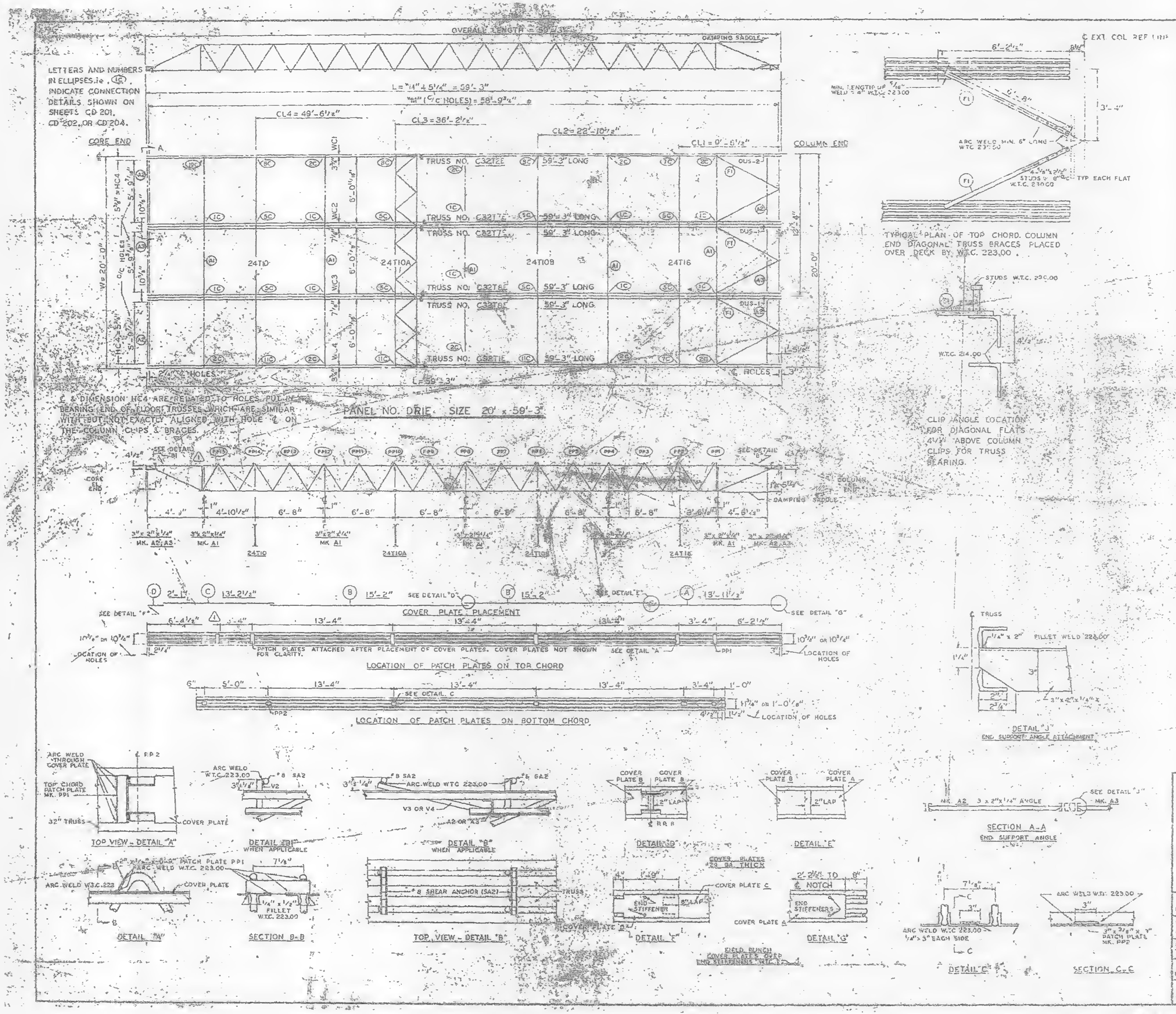
NOTES: (1) ... GEN HOLES IN THE ... 70 SERIES OR ...
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS ...

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-17-69 | AS NOTED | GLC |

REF. DWGS.
7-ABI-5 10-15-68
⚠1

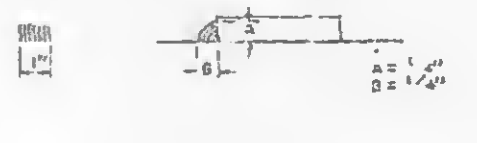
BLDG. A FLOORS 47-48, 70-71 (N)
BLDG. B FLOORS 47-48, 70-71 (WEST) ⚠1
2
ROE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR ... BY James W. White DATE 1/2/70
CHECKED DATE OCT. 31, 1968
DETAILED BY A. CARL WEBER
W.T.C. 221

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.



| REQUIRED MATERIAL FOR ONE PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | NO. | SIZE | |
| FLOOR TRUSSES | [illegible] | | [illegible] 59'-3" | [illegible] |
| | [illegible] | 1 | [illegible] 59'-3" | [illegible] |
| | [illegible] | 2 | [illegible] | [illegible] |
| | [illegible] | 2 | [illegible] 59'-3" | [illegible] |
| BRIDGING TRUSSES | [illegible] | | [illegible] | [illegible] |
| | [illegible] | | 24T10A | [illegible] |
| | [illegible] | | [illegible] | [illegible] |
| [illegible] ANGLE | [illegible] | [illegible] | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | [illegible] |
| | A | 2 | [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | 5 | [illegible] 6'-8" | [illegible] |
| PATCH PLATES | [illegible] | 18 | [illegible] | [illegible] |
| | PP2 | 18 | [illegible] 0'-2" | [illegible] |
| COVER PLATES | A | [illegible] | [illegible] | [illegible] |
| | B | 2 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x 0.35" x 2 [illegible] | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-5½" | ST 296 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-5½" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-9" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET



| NO. | DATE | REVISION |
|---|---|---|
| △1 | 6-17-69 | AS NOTED |

REF. DRWGS.

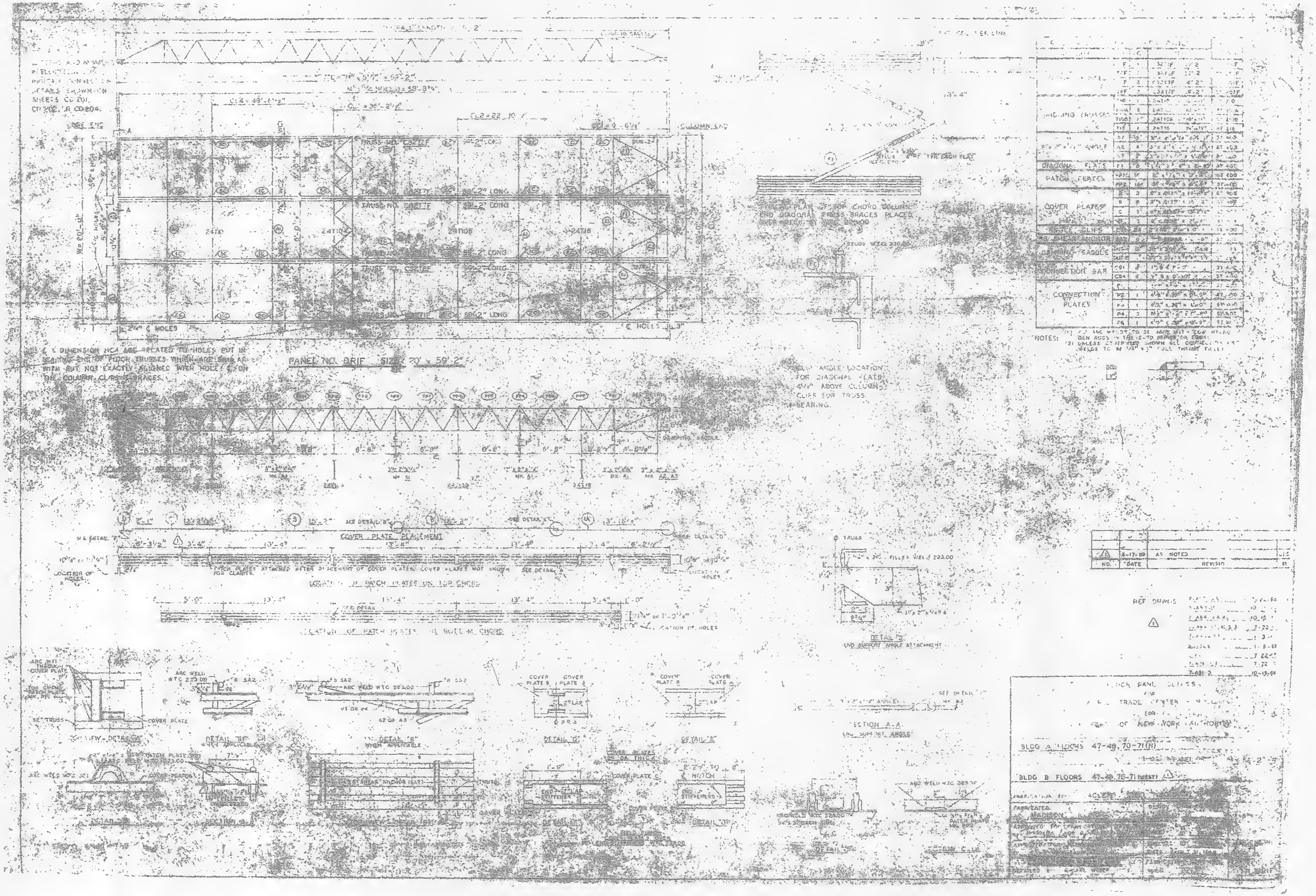
| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-C | 10-15-68 |
| 7-AB4-3,1 | 1-3-68 |
| 7-AB4-15, 16 & 39 | 7-22-68 |
| 7-AB4-12 & 3 | 10-15-68 |
| SA-124 | [illegible] 6-67 |
| 7-AB1-2, 3 & 4 | 7-22-68 |
| 7-AB1-5 | 10-15-68 |

△1

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (SOUTH)
PANEL CE [illegible] x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING 7-AB3-D △1
PLATE
APPROVED FOR FABRICATION James White DATE 1/2/70
DRAWN BY adv DATE JULY 22, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE JULY 22, 1968
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP DRIE
LACLEDE STEEL CO.



| | MARK | NO. | SIZE | |
|---|---|---|---|---|
| BRIDGING TRUSSES | T10 | 1 | 24T10 | [illegible] |
| | T10A | [illegible] | 24T10A | [illegible] |
| | T10B | [illegible] | 24T10B | [illegible] |
| | T18 | 1 | 24T18 | ST 118 |
| 3" x 2" x 1/4" ANGLE | A1 | [illegible] | [illegible] | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | [illegible] | [illegible] | [illegible] |
| DIAGONAL PLATES | P1 | 8 | [illegible] | ST 403 |
| PATCH PLATES | PP1 | [illegible] | [illegible] | ST 400 |
| | PP2 | [illegible] | [illegible] | [illegible] |
| COVER PLATES | A | 3 | [illegible] | ST 408 |
| | B | 3 | [illegible] | [illegible] |
| | C | 3 | [illegible] | [illegible] |
| | D | 3 | [illegible] | [illegible] |
| ANGLE CLIPS | [illegible] | 24 | [illegible] | [illegible] |
| 3/8 SHEAR ANCHOR | [illegible] | [illegible] | [illegible] | [illegible] |
| DAMPING SADDLE | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| CONNECTOR BAR | CB1 | [illegible] | [illegible] | [illegible] |
| | CB4 | 6 | [illegible] | [illegible] |
| CONNECTION PLATES | [illegible] | [illegible] | [illegible] | [illegible] |
| | P2 | 1 | [illegible] | [illegible] |
| | P3 | 1 | [illegible] | [illegible] |
| | P4 | 3 | [illegible] | [illegible] |
| | P6 | 1 | [illegible] | [illegible] |

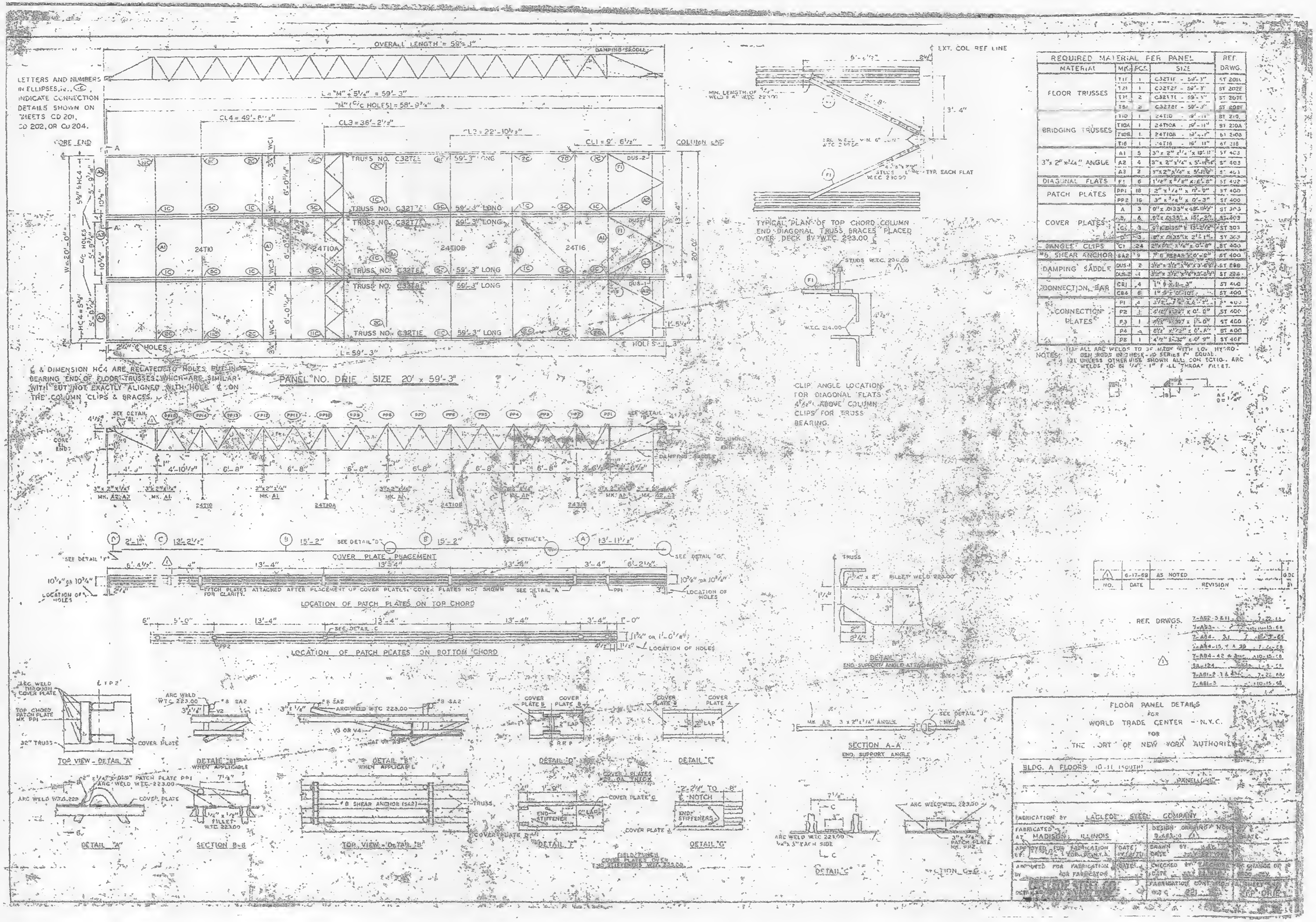
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION WELDS TO BE 1/8" x 1" FULL THROAT FILLET

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 47-48, 70-71 (N)

BLDG B FLOORS 47-48, 70-71 (WEST)

FABRICATION BY
DATE [illegible] 31, 1968
DETAILED BY



| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T1E | 1 | C32T1E - 59'-3" | ST 201E |
| | T2E | 1 | C32T2E - 59'-3" | ST 202E |
| | T7E | 2 | C32T7E - 59'-3" | ST 207E |
| | T8E | 2 | C32T8E - 59'-3" | ST 208E |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 16'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅞" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅞" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x [illegible] x 3'-6" | ST 298 |
| | DUS-2 | 4 | 3½" x 3½" x [illegible] x 3'-6" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 0'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | [illegible] | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 4 | 6½" x 1½" x 0'-8" | ST 400 |
| | P5 | 1 | 4½" x .39" x 0'-9" | ST 40F |

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" - 1" FULL THROAT FILLET.

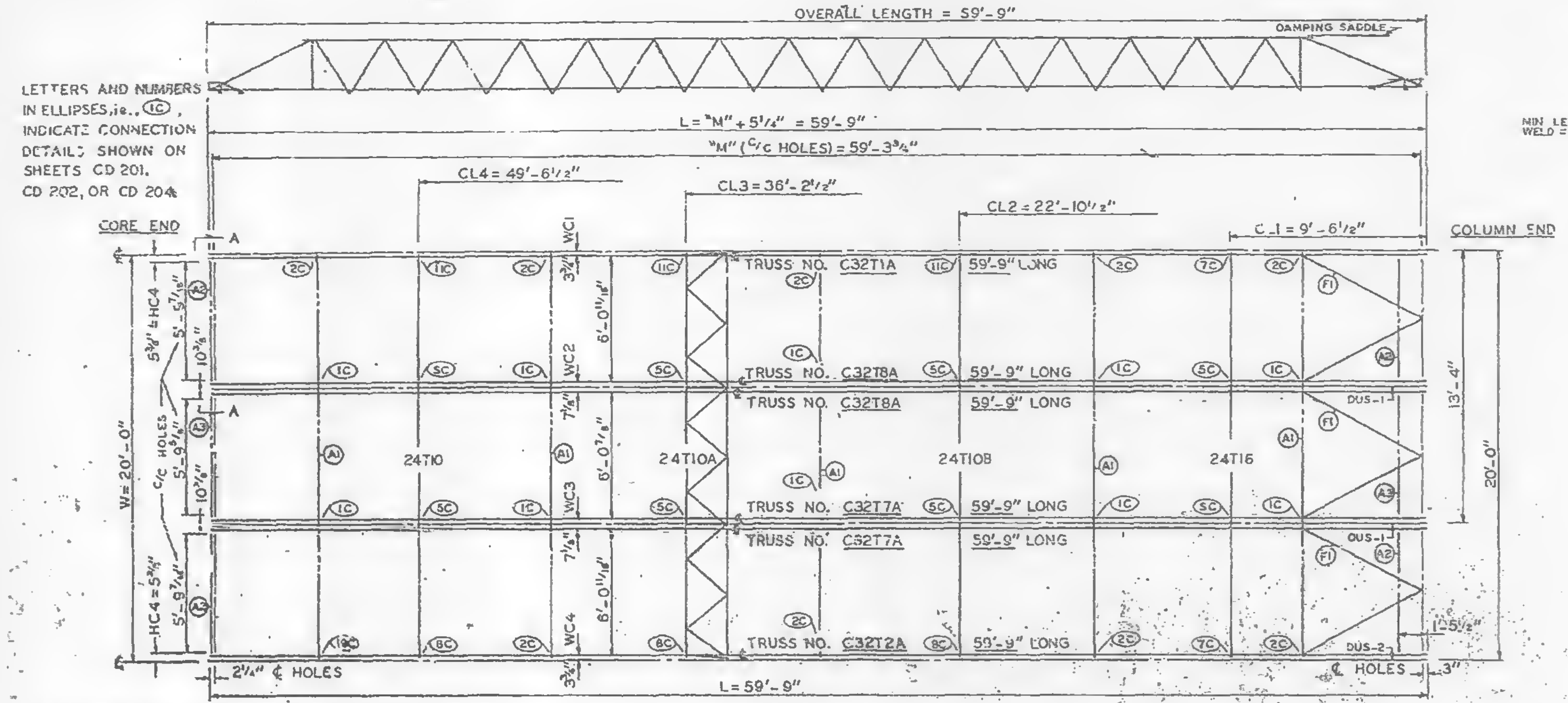
| NO. | DATE | REVISION |
|---|---|---|
| 1 | 6-17-69 | AS NOTED |

REF. DRWGS.
7-AB2-3 & 11 — 7-22-68
7-AB3 — 10-15-68
7-AB4-3 — 7-22-68
7-AB4-13, 14 & 39 — 7-22-68
7-AB4-42 & 43 — 10-15-68
SA-124 — 1-9-69
7-AB1-2, 3 & 4 — 7-22-68
7-AB1-5 — 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (SOUTH)
PANEL DRIE

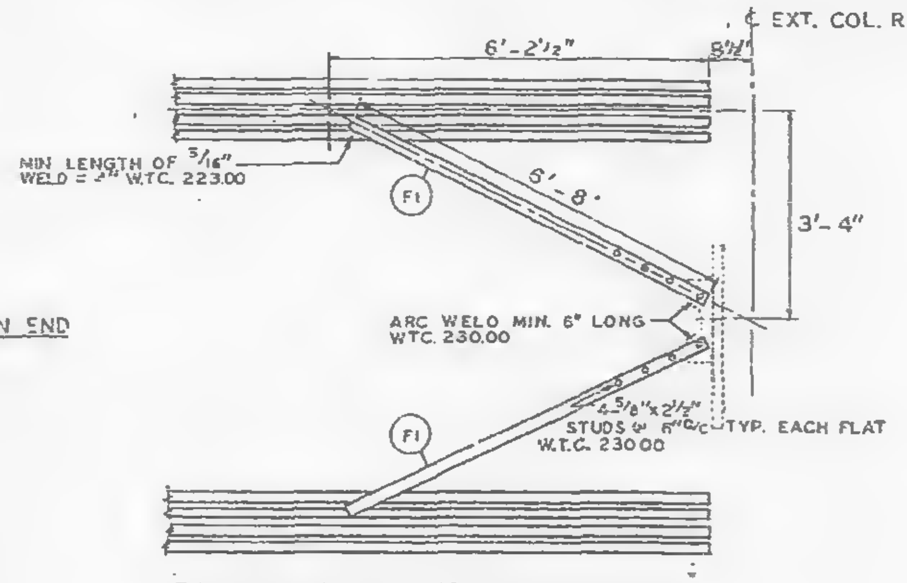
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 9-AB3-10
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE
DRAWN BY [illegible] DATE JULY 22, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE JULY [illegible]
FABRICATION CONTRACT W.T.C. 221
SHEET NO. FP-DRIE



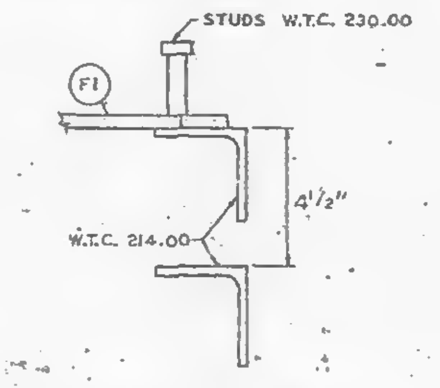
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. - DIA SIZE 20' x 59'-9"


℄ EXT. COL. REF. LINE
6'-2½"
8¾"
MIN LENGTH OF 5/16" WELD = 2" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN. 6" LONG W.T.C. 230.00
4-5/8"x2½" STUDS @ 8" O.C. TYP. EACH FLAT W.T.C. 230.00

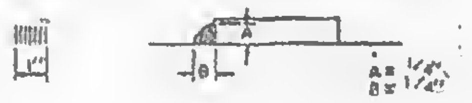
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

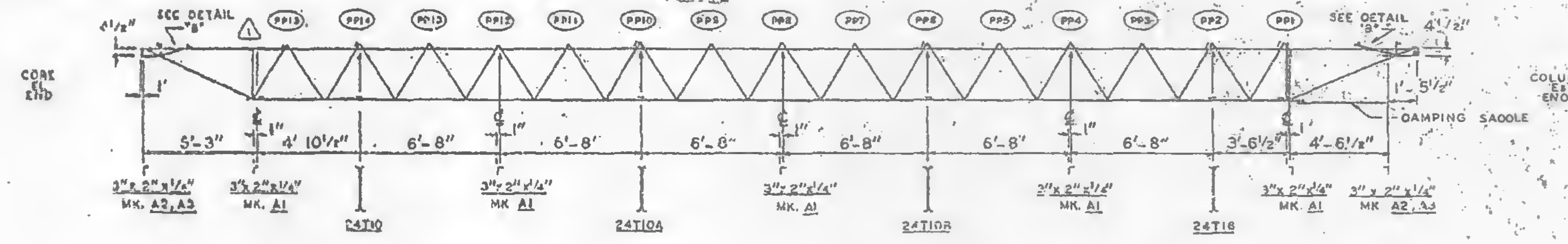


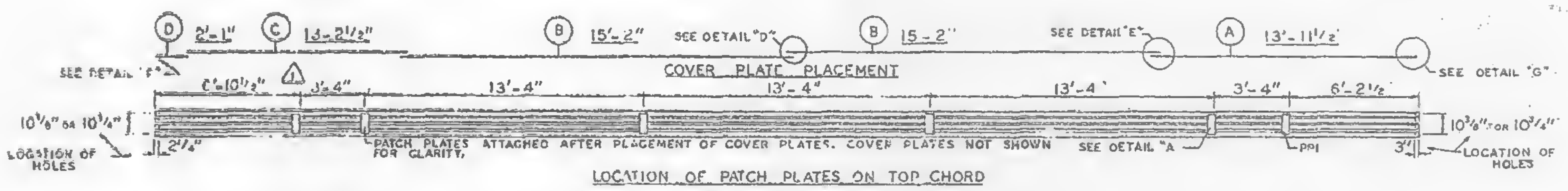
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1A | 1 | C32T1A - 59'-9" | ST 201A |
| | T2A | 1 | C32T2A - 59'-9" | ST 202A |
| | T7A | 2 | C32T7A - 59'-9" | ST 207A |
| | T8A | 2 | C32T8A - 59'-9" | ST 208A |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3"x 2"x¼" ANGLE | A1 | 5 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼" x 5'-11[illegible]" | ST 403 |
| | A3 | 2 | 3"x 2"x¼" x 5'-11[illegible]" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x 3/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 8 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2"x 1½" x¼"x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½" x ¾"x 3'-8⅞" | ST 298 |
| | DUS-2 | 1 | 3½"x 3½" x ¾"x 3'-8⅞" | ST 292 |
| CONNECTION BAR | CB1 | 4 | 1" ∅ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ∅ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x 2½" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P8 | 1 | 4½" x .30" x 0'-9" | ST 401 |

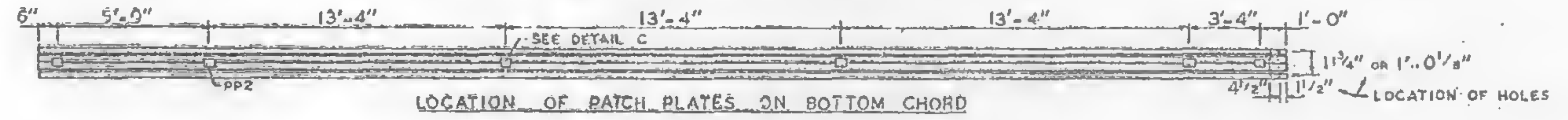
NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET







LOCATION OF PATCH PLATES ON TOP CHORD

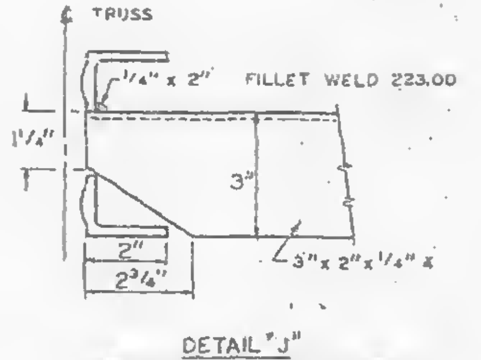


LOCATION OF PATCH PLATES ON BOTTOM CHORD

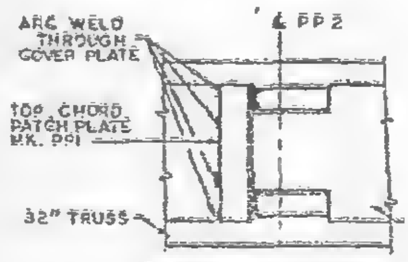
| BY | DATE | REVISION | BY |
|---|---|---|---|
| △1 | 6-10-69 | AS NOTED | G.D.C |

△1 REF. DRWGS.

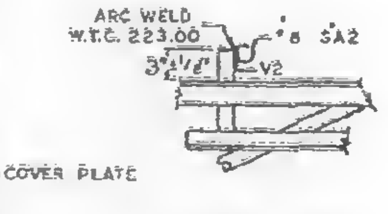
| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-0 | 10-15-68 |
| 7-AB4-39 | 7-22-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB1-2, 3 & 4 | 7-22-68 |
| 7-AB1-3, 4 & 5 | 10-15-68 |



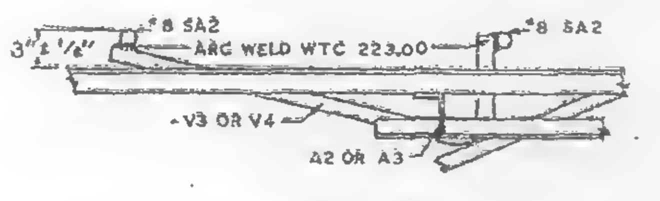
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



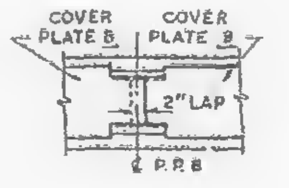
TOP VIEW - DETAIL "A"



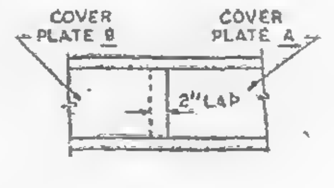
DETAIL "B1"
WHEN APPLICABLE



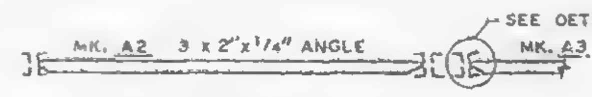
DETAIL "B"
WHEN APPLICABLE



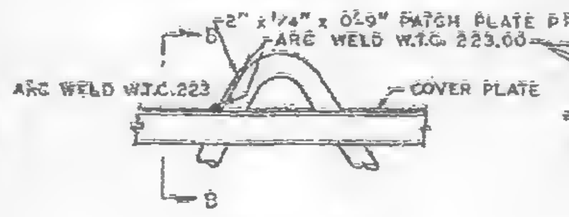
DETAIL "D"



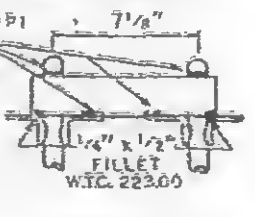
DETAIL "E"



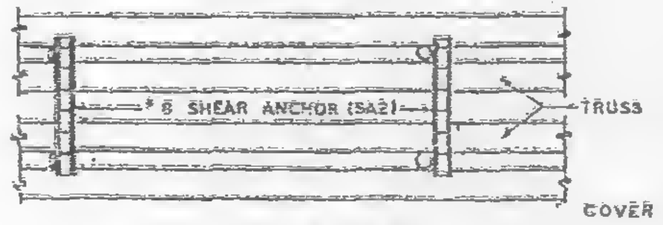
SECTION A-A
END SUPPORT ANGLE



DETAIL "A"

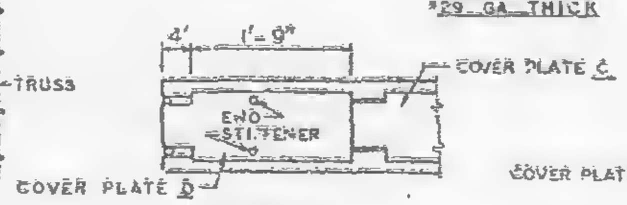


SECTION B-B

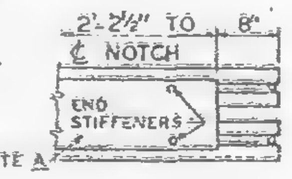


TOP VIEW - DETAIL "8"

COVER PLATES #29 GA. THICK

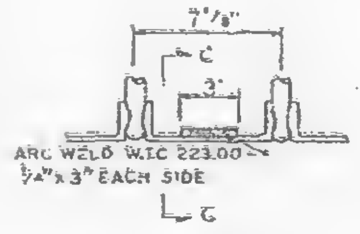


DETAIL "F"

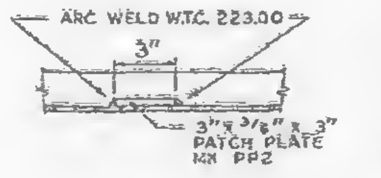


DETAIL "G"

FIELD PUNCH COVER PLATES @ C.P. END STIFFENERS W.T.C. 223.00



DETAIL "C"



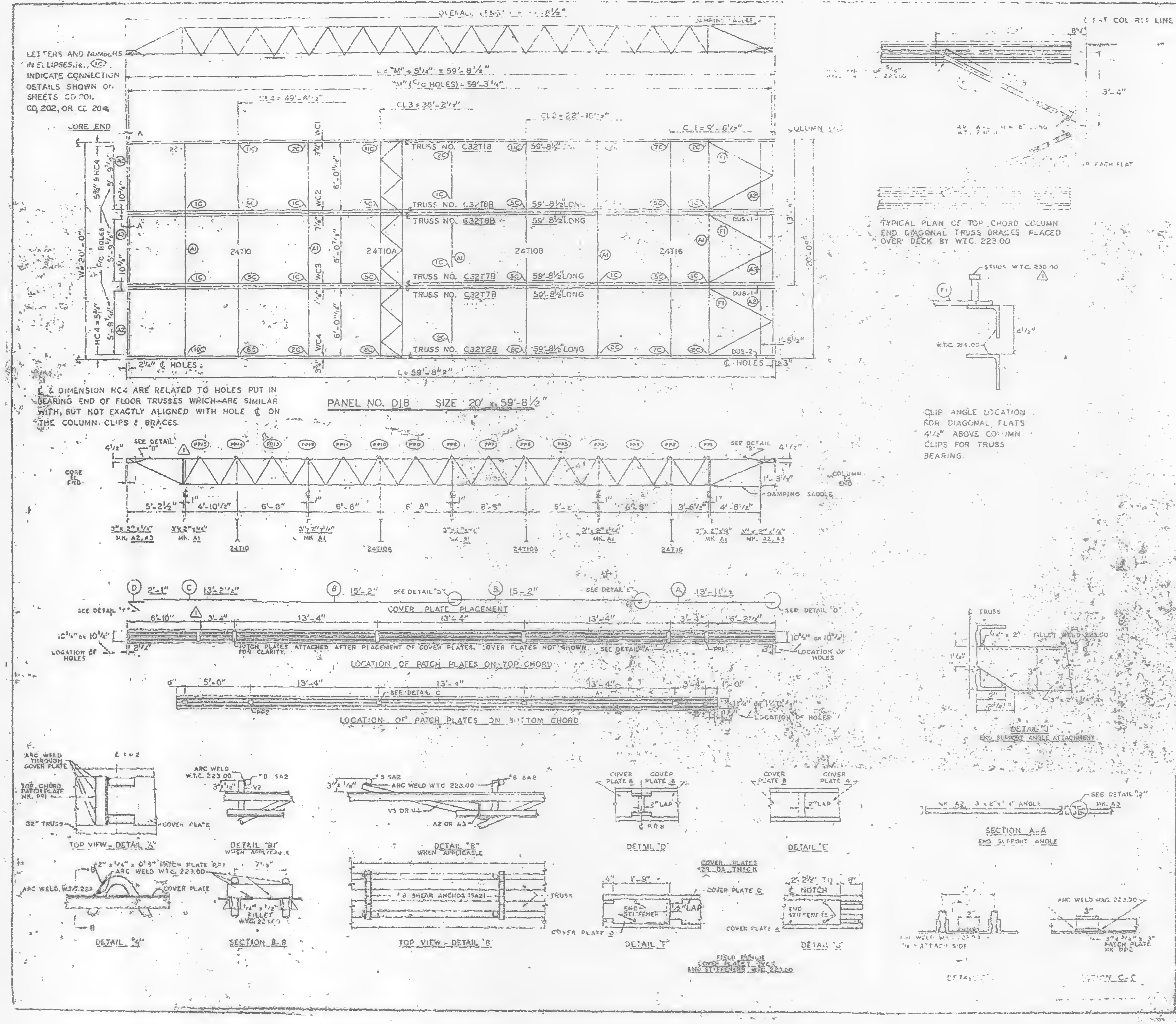
SECTION G-G

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 4[illegible]-58, 60-66, 68, 69 (NORTH)
PANEL [illegible] 20' x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) [illegible] -69 [illegible] △1

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-9 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. | DATE | DRAWN BY: G.D.C. DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M. CHURA DATE JULY 22, 1968 | IN CHARGE OF PROD. DEV. |
| DETA[illegible] | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DIA |



LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

E & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DJ8 SIZE 20' x 59'-8½"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T18 | 1 | C32T18 - 59'-8½" | ST 2018 |
| | T28 | 1 | C32T28 - 59'-8½" | ST 2028 |
| | T7B | 2 | C32T7B - 59'-8½" | ST 207B |
| | T8B | 2 | C32T8B - 59'-8½" | ST 208B |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3"x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x ¼" x 5'-11⅞" | ST 403 |
| | A3 | 2 | 3"x 2"x ¼" x 5'-11⅞" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 13 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3' [illegible] | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1'-3" | ST 400 |
| | CB4 | 5 | 1" ɸ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ¾" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .20" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .32" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .30" x 0'-[illegible]" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.

A = ⅛"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-9-69 | AS NOTED | G.D.C. |

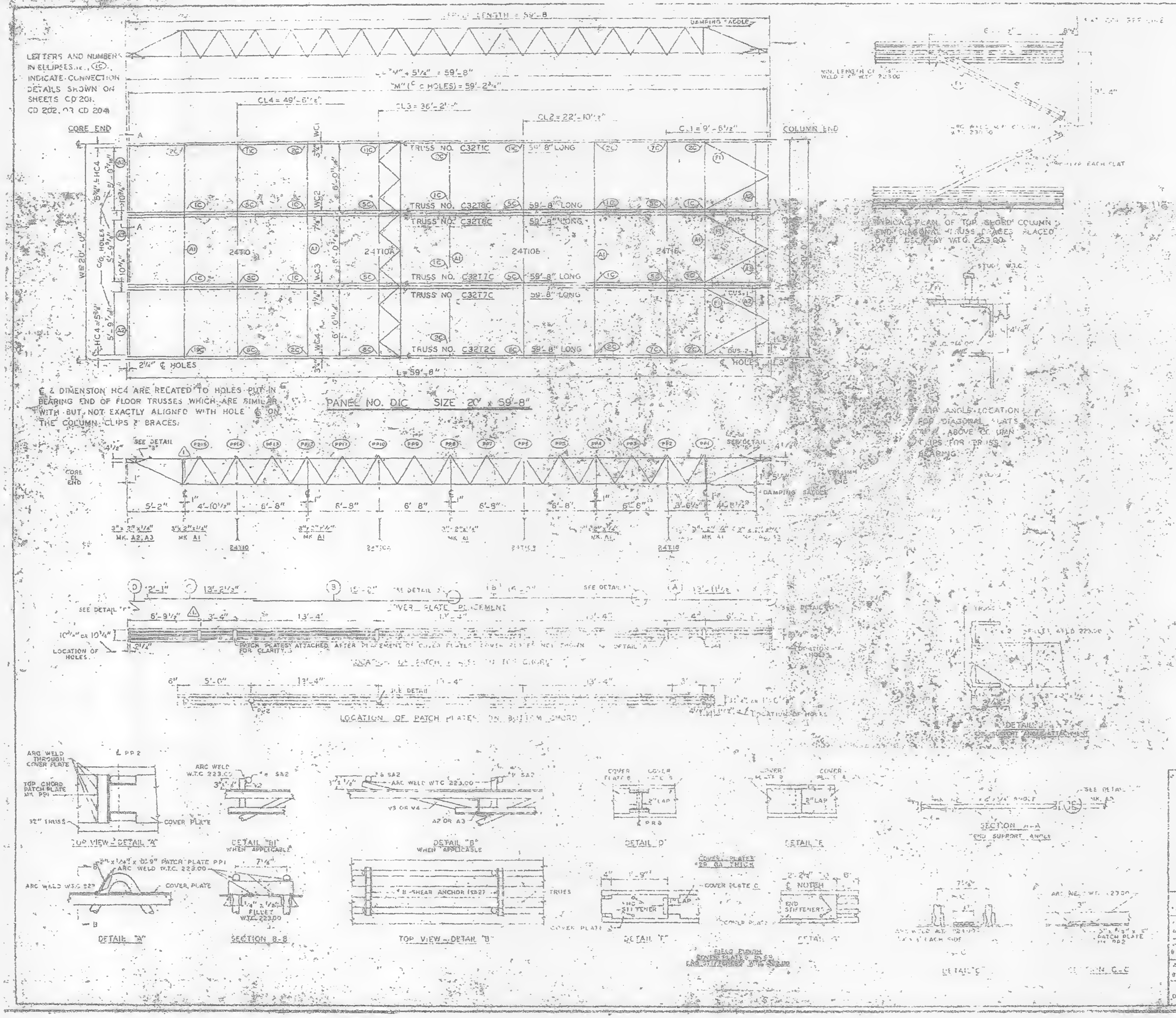
1 REF. DRWGS.
7-AB2-3 & 11 7-22-68
7-AB3-2 10-15-68
7-AB4-31 1-3-68
7-AB4-19, 16 & 30 7-22-68
7-AB4-22 & 3 10-15-68
SC-1[illegible] 1-6-59
7-181-2, 3 & 4 7-22-68
7-181-5 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 84-91, 93-106 (N)
PANEL DJ8 - [illegible]
BLDG. B FLOORS 84-91, 93-106 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-9 | PLATE [illegible] |
| APPROVED FOR FABRICATION BY FOR PONYA | DATE 7-2/[illegible] | DRAWN BY [illegible] DATE OCT 24, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY [illegible] DATE OCT 24, 1968 | IN CHARGE OF [illegible] |
| DETAILED BY P. CARL WEBER | | FABRICATION COVER NO. W.E.G. 221 | SHEET NO. [illegible] |



LETTERS AND NUMBERS IN ELLIPSES i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
CORE END
COLUMN END
DAMPING SADDLE
L = "M" + 5¼" = 59'-8"
"M" (℄ HOLES) = 59'-2¾"
CL4 = 49'-6½"
CL3 = 36'-2"
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T1C 59'-8" LONG
TRUSS NO. C32T8C 59'-8" LONG
TRUSS NO. C32T7C 59'-8" LONG
TRUSS NO. C32T2C 59'-8" LONG
24T10
24T10A
24T10B
24T16
2¼" ℄ HOLES
L = 59'-8"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIC SIZE 20' x 59'-8"
SEE DETAIL "B"
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2
CORE END
DAMPING SADDLE
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS PLACES PLACED OVER DECK BY W.T.C. 223.00
TOP VIEW - DETAIL "A"
DETAIL "B" WHEN APPLICABLE
DETAIL "B1" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
SECTION A-A END SUPPORT ANGLE
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "F"
DETAIL "C"
SECTION C-C
DETAIL SUPPORT ANGLE ATTACHMENT
ARC WELD W.T.C. 223.00
COVER PLATE

| [illegible] PER PANEL | | | | REF |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T1C | 1 | C32T1C - 59'-8" | ST 201C |
| | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T7C | 2 | C32T7C - 59'-8" | ST 207C |
| | T8C | 2 | C32T8C - 59'-8" | ST 208C |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| [illegible] ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-1[illegible]" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-1[illegible]" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 5 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2½" x 1½" x ¼" x 0'-3" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ф x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ф x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW-HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-10-69 | AS NOTED | G.D.C. |

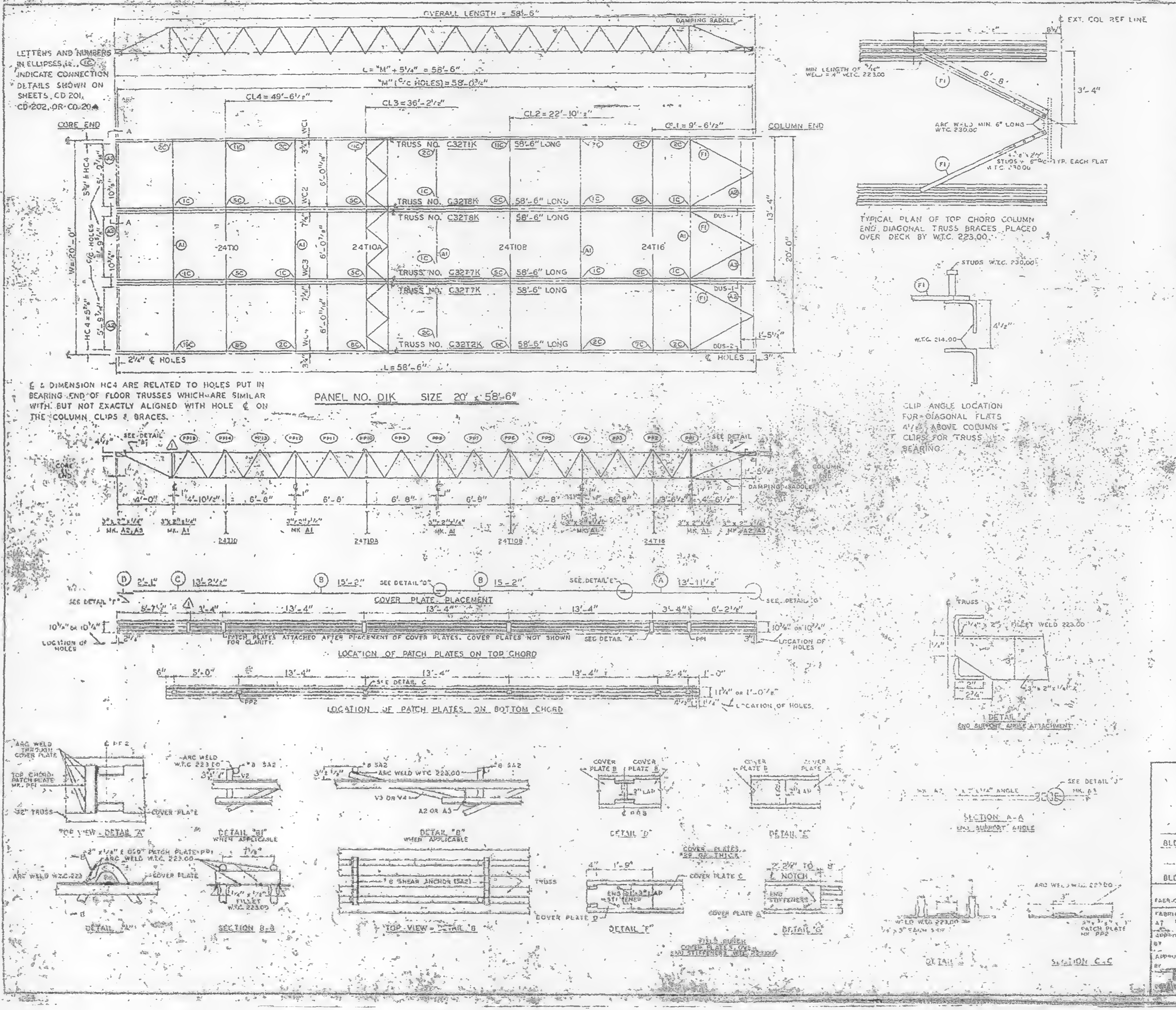
1 REF. DRWGS.
7-A82-5 & 11 7-22-68
7-A83-9 10-15-68
7-A84-31 1-3-69
7-A84-15, 8 & 39 7-22-68
7-A84-42 & 3 10-15-68
S-124 1-6-69
7-A81-2,3 & 4 7-22-68
7-A81-5 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91 & 93-106 [illegible]
PANEL DIC 59'-8"
BLDG. B FLOORS 50-58, 60-74, 79-91 & 93-106 (EAST) 1

FABRICATED BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| DESIGNED BY [illegible] | | DESIGN DRAWING NO. 7-A83-9 | PLATE |
| APPROVED FOR FABRICATION BY P.N.Y.P.A. | DATE 1/2/[illegible] | DRAWN BY G.D.C.<br>DATE OCT 24, 1968 | |
| APPROVED FOR FABRICATION BY [illegible] | DATE | CHECKED BY T.M.CHURA<br>DATE OCT 24 1968 | IN CHARGE OF DRWG. DEPT. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. DIC |



| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | [illegible] |
| FLOOR TRUSSES | T1K | 1 | C32T1K - 58'-6" | ST 201K |
| | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T7K | 2 | C32T7K - 58'-6" | ST 207K |
| | T8K | 2 | C32T8K - 58'-6" | ST 208K |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | [illegible] | 24T16 - 19'-11" | ST [illegible] |
| 3" x 2" x ¼" [illegible] | A1 | 5 | 3" x 2" x ¼" x [illegible] | ST [illegible] |
| | A2 | 4 | 3" x 2" x ¼" x 5'-[illegible] | ST [illegible] |
| | A3 | 2 | 3" x 2" x ¼" x 5'-[illegible] | ST [illegible] |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅜" x 6'-8" | ST 400 |
| PATCH PLATES | PP1 | 14 | 2" x ¼" x 0'-9" | ST [illegible] |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x [illegible] | ST [illegible] |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-3" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x [illegible]-0" | ST 400 |
| | P4 | 3 | 4½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x [illegible] | ST 4[illegible] |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

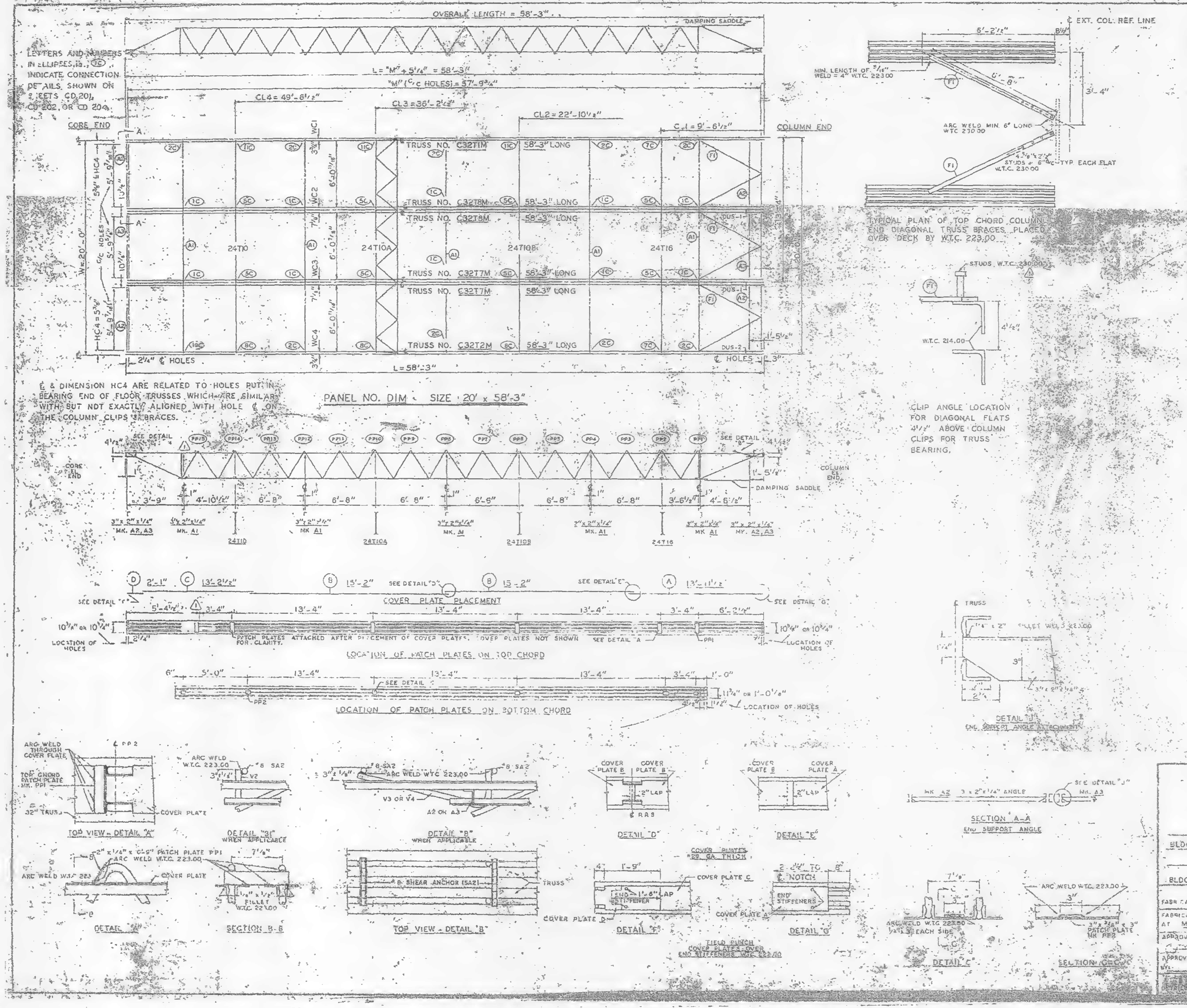
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-10-69 | AS NOTED | [illegible] |

⚠1 REF. DRWGS
7.482-5 & 11 [illegible]
7.482 9 [illegible]
7.484 41 [illegible]
7.484-15, 16 & 39 7-22-68
7.484-47 & 3 2-15-68
ST 124 6 69
[illegible] 2, 3 & 4 2[illegible] 68
[illegible] [illegible] 68

FLOOR PANEL DETAILS
FOR
[illegible] TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46 (N)
PANEL [illegible] x 58'-6"
BLDG. B FLOORS 46 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7.483-9
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
DRAWN BY [illegible] DATE OCT. 24, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE [illegible] 24, 1968
IN CHARGE OF [illegible]
LACLEDE STEEL CO.
FABRICATOR CONT. NO. W.T.C. [illegible] 221
SHEET NO. [illegible] D1K


OVERALL LENGTH = 58'-3"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e., (3C) INDICATE CONNECTION DETAILS, SHOWN ON SHEETS CD 201, CD 202, OR CD 204.
L = "M" + 5¼" = 58'-3"
"M" (C/C HOLES) = 57'-9¾"
CL4 = 49'-8½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1M 58'-3" LONG
TRUSS NO. C32T8M 58'-3" LONG
TRUSS NO. C32T8M 58'-3" LONG
TRUSS NO. C32T7M 58'-3" LONG
TRUSS NO. C32T7M 58'-3" LONG
TRUSS NO. C32T2M 58'-3" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
W = 20'-0"
HC4 = 5¾"
DUS-1
DUS-2
2¼" ℄ HOLES
℄ HOLES
L = 58'-3"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIM SIZE 20' x 58'-3"
℄ EXT. COL. REF. LINE
6'-2½"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN. 6" LONG W.T.C. 230.00
STUDS @ 6" C/C TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL
CORE ℄ END
COLUMN ℄ END
DAMPING SADDLE
3'-9"
4'-10½"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6½"
4'-6½"
1'-5½"
3" x 2" x ¼" MK. A2, A3
3" x 2" x ¼" MK. A1
24T10
24T10A
24T10B
24T16
COVER PLATE PLACEMENT
2'-1"
13'-2½"
15'-2"
15'-2"
13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
5'-4½"
3'-4"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2½"
10⅞" OR 10¾"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
PP1
LOCATION OF PATCH PLATES ON TOP CHORD
5'-0"
13'-4"
13'-4"
13'-4"
3'-4"
1'-0"
PP2
11¾" OR 1'-0⅛"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
℄ TRUSS
FILLET WELD W.T.C. 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3 x 2" x ¼" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
#8 SA2
DETAIL "31" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
2" x ¼" x 0'-5" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
COVER PLATE
DETAIL "A"
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #28 GA. THICK
COVER PLATE C
END STIFFENER
1'-6" LAP
COVER PLATE D
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
END STIFFENERS
℄ NOTCH
COVER PLATE A
DETAIL "G"
ARC WELD W.T.C. 223.00 EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG |
| FLOOR TRUSSES | T1M | 1 | C32T1M - 58'-3" | ST 201M |
| | T2M | 1 | C32T2M - 58'-3" | ST 202M |
| | T7M | 2 | C32T7M - 58'-3" | ST 207M |
| | T8M | 2 | C32T8M - 58'-3" | ST 208M |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 8'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-8" | ST 400 |
| | PP2 | 15 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 8" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 8" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 8" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 8" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" x ½" x 1 - 3" | ST 400 |
| | CB2 | 5 | [illegible] | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .30" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-6" | ST 400 |
| | P8 | 1 | 4½" x .30" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-10-69 | AS NOTED | J.D. |

REF. DRWGS. ⚠1

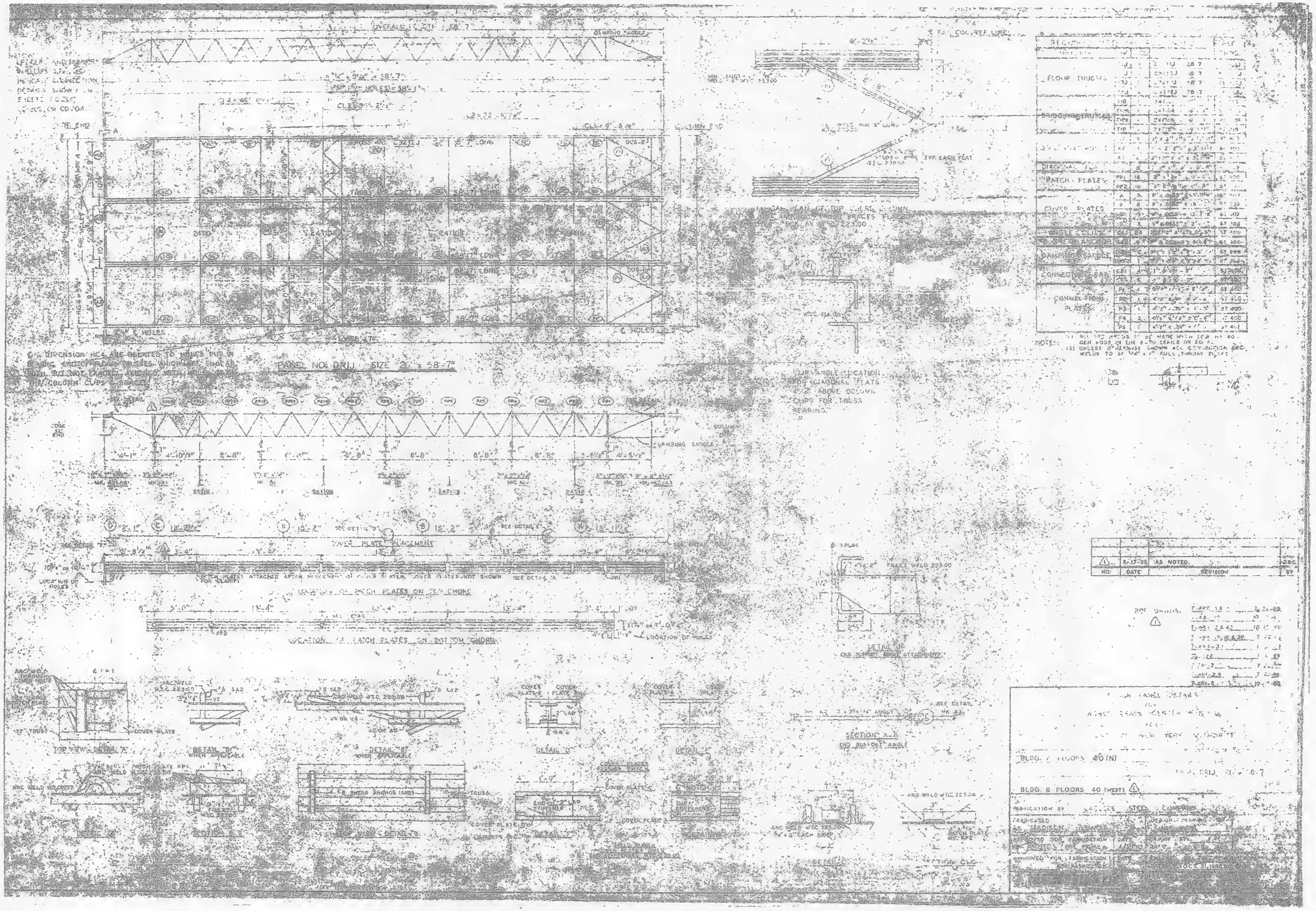
| | |
|---|---|
| 7-A92-5 & 11 | 7-22-68 |
| 7-A87-9 | 10-15-68 |
| 7-A84-3.1 | 1- -69 |
| 7-A84-15, 16 & 39 | 7-22-68 |
| 7-A84-42 & 3 | 10-15-68 |
| SC-124 | 1-6-69 |
| 7-A81-2, 3 & 4 | 7-22-68 |
| 7-A81-5 | 10-19-68 |

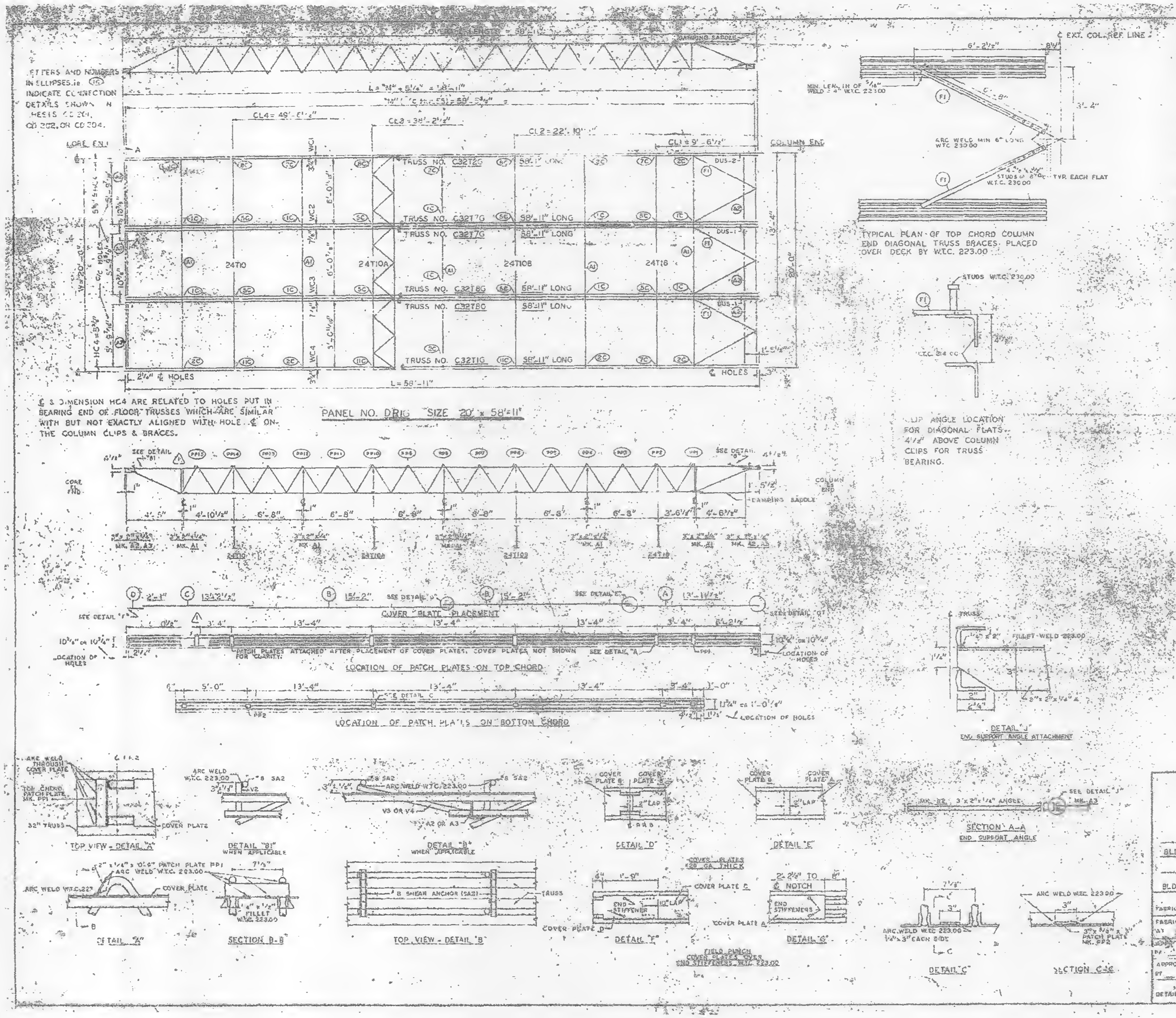
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL
BLDG. B FLOORS 72-73 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A89-9 10-15-68 | |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A | DATE | DRAWN BY: DATE OCT 24, 1968 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY: TAKEMURA DATE OCT 24, 1968 | IN CHARGE OF |
| | | FABRICATION CONT. NO. W.T.C. # 221 | |


OVERALL LGTH 58'-7"
DAMPING SADDLE
COLUMN END
PANEL NO. DRIJ SIZE 20' x 58'-7"
24" ℄ HOLES
℄ HOLES
THE COLUMN CLIPS & BRACES
58'-7" LONG
4'-1"
4'-10¼"
6'-8"
3'-6"
DAMPING SADDLE
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
TOP VIEW DETAIL "A"
DETAIL "B" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
SHEAR ANCHOR
DETAIL "D"
COVER PLATE
SECTION A-A
END BUFFOUT ANGLE
TYPICAL PLAN OF TOP CHORD, COLUMN AND DIAGONAL TRUSS BRACES PLACED
WTC 223.00
WELD MIN 8" LONG
STUDS @ 6" O.C. TYP. EACH FLAT
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
FILLET WELD 223.00
DETAIL
FLOOR TRUSSES
BRIDGING TRUSSES
DIAGONAL FLAT
PATCH PLATES
COVER PLATES
ANGLE CLIPS
SHEAR ANCHOR
DAMPING SADDLE
CONNECTING BAR
CONNECTION PLATES
NOTES:
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET
5-17-69
AS NOTED.
NO.
DATE
REVISION
BY
BLDG. B FLOORS 40 (N)
BLDG. B FLOORS 40 (WEST)
FABRICATION BY
STEEL
FABRICATED
MADISON
APPROVED FOR FABRICATION
DATE
OCT. 31, 1968


COVER PLATE LENGTH = 58'-11"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.
L = "N" + 6 1/4" = 58'-11"
CL4 = 49'-6 1/2"
CL3 = 38'-2 1/2"
CL2 = 22'-10"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T2G 58'-11" LONG
TRUSS NO. C32T7G 58'-11" LONG
TRUSS NO. C32T7G 58'-11" LONG
TRUSS NO. C32T8G 58'-11" LONG
TRUSS NO. C32T8G 58'-11" LONG
TRUSS NO. C32T1G 58'-11" LONG
24T10
24T10A
24T10B
24T18
WC1
WC2
WC3
WC4
DUS-2
DUS-1
HC4 = 5 3/4"
2 1/4" ℄ HOLES
℄ HOLES
L = 58'-11"
20'-0"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. D RIG SIZE 20' x 58'-11"
℄ EXT. COL. REF. LINE
6'-2 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS @ 8" O.C. TYP. EACH FLAT W.T.C. 230.00
3'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B1"
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
4'-5"
4'-10 1/2"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6 1/2"
4'-6 1/2"
MK. A2, A3
MK. A1
24T10
24T10A
24T10B
24T18
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "E"
SEE DETAIL "G"
3'-4"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2 1/2"
10 3/4" or 10 3/4"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD
5'-0"
13'-4"
13'-4"
13'-4"
3'-4"
1'-0"
SEE DETAIL C
PP2
11 3/4" or 1'-0 1/4"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TRUSS
3"x2"
FILLET WELD 223.00
2"x2"x1/4"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
#8 SA2
DETAIL "B1" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
#8 SA2
V3 OR V4
A2 OR A3
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
MK. A2 3"x2"x1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
2"x1/4"x0'-8" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
COVER PLATE
DETAIL "A"
1/4" x 1 1/2" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES 20 GA. THICK
1'-8"
COVER PLATE C
END STIFFENER
COVER PLATE D
COVER PLATE A
DETAIL "F"
2'-2 1/4" TO ℄ NOTCH
END STIFFENERS
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
7 1/2"
3"
ARC WELD W.T.C. 223.00 1/4"x3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3"
3"x3/8" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1G | 1 | C32T1G - 58'-11" | ST 206 |
| | T2G | 1 | C32T2G - 58'-11" | [illegible] |
| | T7G | 2 | C32T7G - 58'-11" | [illegible] |
| | T8G | 2 | C32T8G - 58'-11" | [illegible] |
| BRIDGING TRUSSES | T10 | [illegible] | 24T10 - 19'-11" | [illegible] |
| | T10A | 1 | 24T10A - 19'-11" | [illegible] |
| | T10B | 1 | 24T10B - 19'-11" | [illegible] |
| | T18 | 1 | 24T18 - 19'-11" | [illegible] |
| 3" x 2" x 1/4" ANGLE | A1 | 3 | 3" x 2" x 1/4" x 15'-[illegible] | [illegible] |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11[illegible] | [illegible] |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-[illegible] | [illegible] |
| DIAGONAL FLATS | F1 | 6 | 3 1/2" x 5/16" x 6'-8" | ST 40[illegible] |
| PATCH PLATES | PP1 | 18 | 2" x 1/16" x 0'-8" | ST [illegible] |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 4[illegible]0 |
| COVER PLATES | A | 3 | 6" x .0135" x 13'-11 1/2" | [illegible] |
| | B | 6 | 6" x .0135" x 13'-2" | ST 303 |
| | C | 3 | 6" x .0135" x 13'-2 1/2" | ST 303 |
| | D | [illegible] | 6" x .0135" x [illegible] | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-3" | ST 400 |
| DAMPING SADDLE | DUS-2 | 2 | 3 1/2" x 3 1/2" x 3/8" x 5'-[illegible] | ST 208 |
| | DUS-1 | 1 | 3 1/2" x 3 1/2" x 3/8" x [illegible] | ST 208 |
| CONNECTION BAR | CB1 | 4 | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| CONNECTION PLATES | P1 | | 3 1/2" x [illegible] | ST 40[illegible] |
| | P2 | | 4 1/2" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x [illegible] | ST 400 |
| | P4 | 3 | 6" x [illegible] | ST 400 |
| | P5 | [illegible] | 4 1/2" x [illegible] | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| | | | |
|---|---|---|---|
| 1 | 6-17-68 | AS NOTED | |
| NO. | DATE | REVISION | |

RES. DRWGS. 1

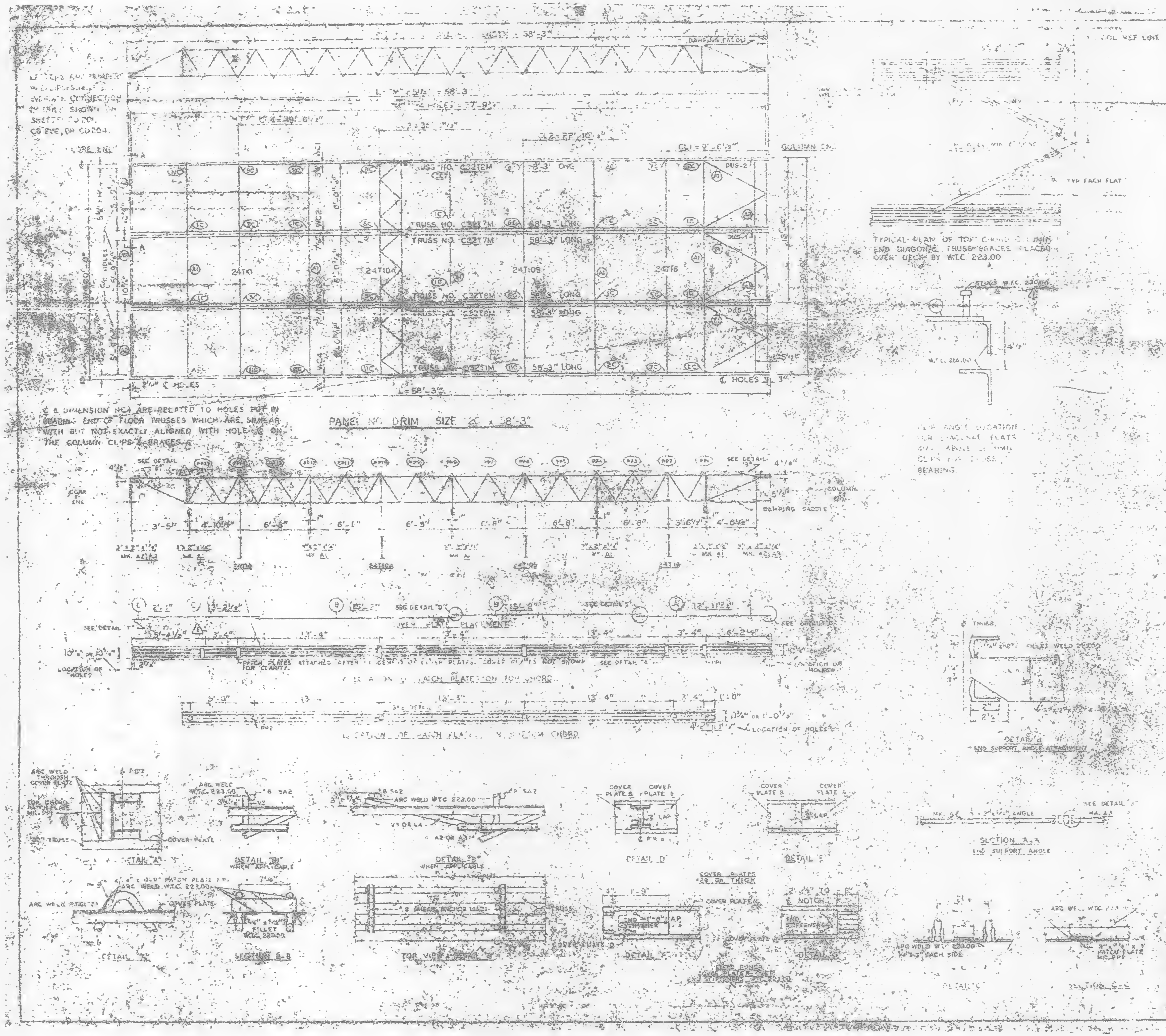
| | |
|---|---|
| 7-A82-3,4,11 | [illegible] |
| [illegible] | [illegible] |
| [illegible] A1 | [illegible] |
| 7-A80-16,16 & 39 | [illegible] |
| 7-A84-42 & 3 | [illegible] |
| SA-124 | [illegible] |
| 7-A81-2,3 & 4 | [illegible] |
| 7-A81-5 | [illegible] |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11, 3- (NORTH) 39-40 (SOUTH) 1
PATTERN [illegible] 58'-11"
BLDG B FLOORS 39 (EAST & WEST) 40 (EAST) 1

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 2-A83-19 | PLATA |
| APPROVED FOR FABRICATION BY [illegible] (FOR PONY A.) | DATE 1/8/[illegible] | DRAWN BY [illegible] DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY [illegible] DATE JULY 22, 1968 | PURCHASE OR [illegible] |
| DETAILED BY [redacted] | | FABRICATION CONT. NO. W.T.C. 321 | SHEET NO. [illegible] |


L = 58'-3"
DAMPING SADDLE
COL REF LINE
CORE END
COLUMN END
TRUSS NO. C32T2M
58'-3" LONG
TRUSS NO. C32T7M
TRUSS NO. C32T1M
24T10
24T10A
24T10B
24T16
DUS-1
DUS-2
2⅛" ℄ HOLES
℄ HOLES
℄ & DIMENSION MC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES
PANEL NO. DRIM SIZE 20 x 58'-3"
SEE DETAIL "B"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER ℄ CENTER OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
TYP. EACH FLAT
CLIP ANGLE LOCATION FOR DIAGONAL FLATS AVAILABLE AT COLUMN CLIPS FOR TRUSS BEARING
TRUSS
ARC WELD W.T.C. 223.00
DETAIL "G"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
COVER PLATE
DETAIL "A"
DETAIL "B1"
WHEN APPLICABLE
DETAIL "B"
DETAIL "D"
DETAIL "E"
COVER PLATES 22 GA. THICK
END STIFFENER
LAP
NOTCH
DETAIL "F"
SECTION B-B
FILLET W.T.C. 223.00
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "C"
SECTION C-C
ARC WELD W.T.C. 223.00 EACH SIDE
PATCH PLATE MK. PP1

| | | | | |
|---|---|---|---|---|
| [illegible] | M | [illegible] | M 58'-3" | [illegible] |
| | M | [illegible] | M 58'-3" | [illegible] |
| | M | [illegible] | M 58'-3" | [illegible] |
| | 2M | [illegible] | M 58'-3" | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| PATCH PLATES | [illegible] | 18 | [illegible] | [illegible] |
| | [illegible] | 18 | [illegible] | [illegible] |
| COVER PLATES | [illegible] | 3 | [illegible] | [illegible] |
| | [illegible] | 3 | [illegible] | [illegible] |
| | [illegible] | 3 | [illegible] | [illegible] |
| | [illegible] | 3 | [illegible] | [illegible] |
| ANGLE CLIPS | C | 24 | [illegible] | [illegible] |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR | [illegible] |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | ST 236 |
| | DUS-2 | [illegible] | [illegible] | ST 236 |
| CONNECTION BAR | CB1 | [illegible] | [illegible] | ST 400 |
| | CB4 | [illegible] | [illegible] | ST 430 |
| CONNECTION PLATES | [illegible] | 4 | [illegible] | [illegible] |
| | 12 | [illegible] | 4" x .38" x [illegible] | ST 400 |
| | [illegible] | 1 | 4½" x .38" x [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | 1 | [illegible] | [illegible] |

NOTES: (1) [illegible] GEN. [illegible]
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE [illegible] x 1" FULL THROAT FILLET

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| ⚠1 | 8-17-68 | AS NOTED | G.D.C. |

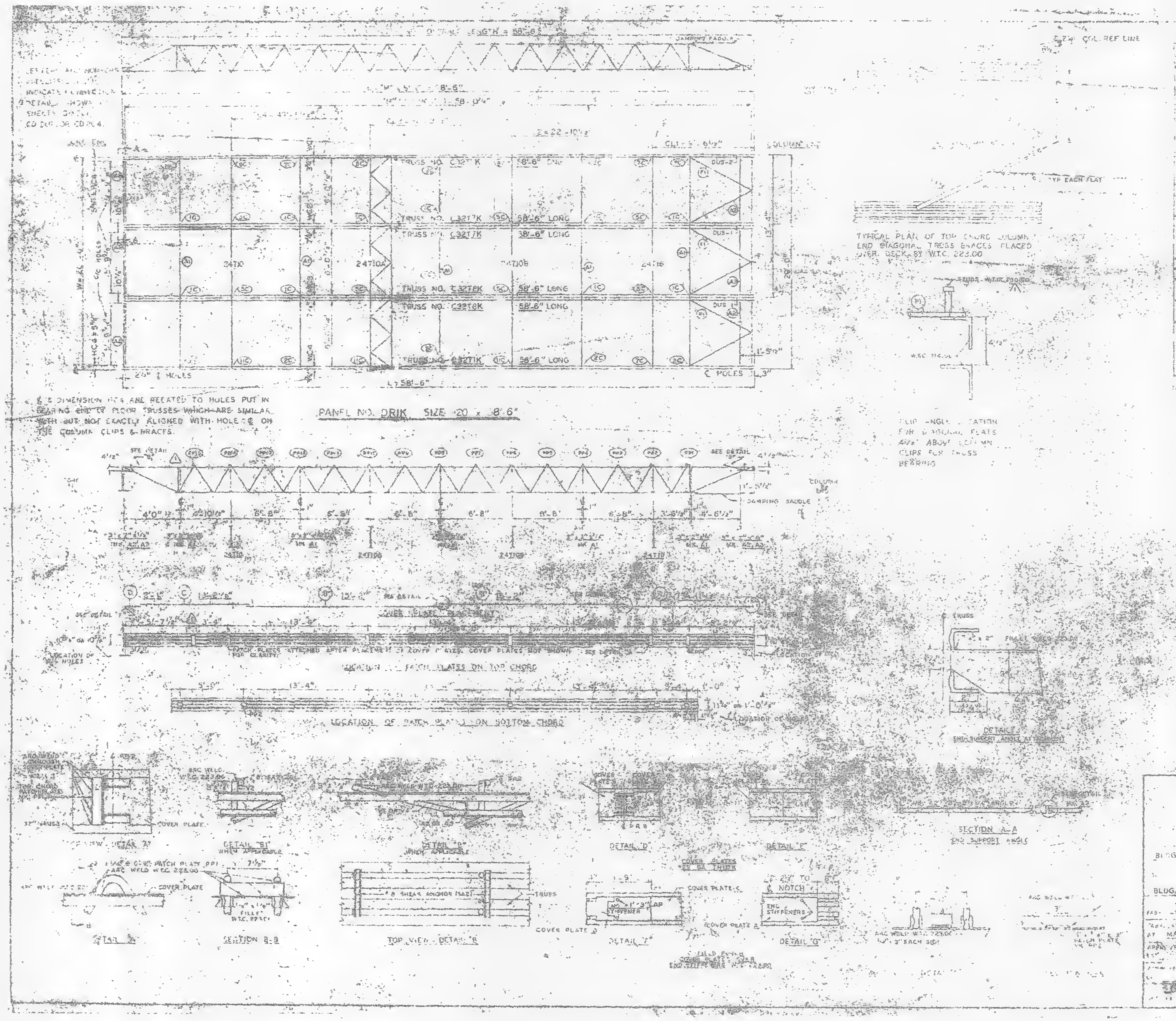
REF. DRWGS ⚠1

[illegible] 7-[illegible]
[illegible] 10-15
[illegible] 39
[illegible]
[illegible] 1-[illegible]-69
[illegible]
[illegible]
7-[illegible] 10-[illegible]-68

PANEL [illegible]
FOR
WORLD TRADE CENTER N.Y.C.
[illegible]
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
BLDG. B FLOORS 72-73 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION [illegible] DATE 1/21/[illegible]
[illegible] FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
CHECKED BY [illegible] DATE OCT [illegible] 1968


OVERALL LENGTH = 58'-6"
DAMPING PADS
COL. REF LINE
LETTERS AND NUMBERS ENCLOSED IN [illegible] INDICATE CONNECTION & DETAILS SHOWN ON SHEETS [illegible] CD 20?-3R CD 20 4.
E = 22'-10 1/2"
CL = 5'-6 1/2"
COLUMN C/L
TRUSS NO. C32?K 58'-6" LONG
TRUSS NO. C3217K 58'-6" LONG
TRUSS NO. C3217K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T1K 58'-6" LONG
24T10
24T10A
24T10B
DUS-2
DUS-1
DUS
W = 20'
C/C HOLES
2 1/4" ⌀ HOLES
L = 58'-6"
€ & DIMENSION ETC. ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIK SIZE 20' x 58'-6"
TYP EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 220.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
SEE DETAIL "B"
4 1/2"
1'-5 1/2"
DAMPING SADDLE
COLUMN C/L
4'-0"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
4'-6 1/2"
24T10
24T10A
24T10B
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
5'-0"
13'-4"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
TRUSS
DETAIL "F"
END SUPPORT ANGLE ATTACHMENT
ARC WELD W.T.C. 223.00
COVER PLATE
DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
SECTION A-A
END SUPPORT ANGLE
COVER PLATES TO BE THICK
# 8 SHEAR ANCHOR (SA2)
TRUSS
NO. 1"-3" LAP STIFFENER
2 1/2" TO NOTCH
ENG. STIFFENERS
COVER PLATES
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"

| | | | | |
|---|---|---|---|---|
| FLOOR TRUSS | [illegible]K | [illegible] | [illegible]K 58'-6" | [illegible]K |
| | [illegible]K | [illegible] | [illegible]K 58'-6" | [illegible]K |
| | [illegible]7K | [illegible] | [illegible]K 58'-6" | [illegible]K |
| | [illegible]K | [illegible] | [illegible]K 58'-6" | [illegible]K |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | A2 | 4 | [illegible] | [illegible] |
| [illegible] PLATES | [illegible] | [illegible] | [illegible] | [illegible] |
| PATCH PLATES | [illegible] | 10 | [illegible] | [illegible] |
| COVER PLATES | C | 3 | 8" x 0.35" x [illegible] | [illegible] |
| | D | 3 | 8" x 0.35" x [illegible] | [illegible] |
| ANGLE CLIPS | C1 | 24 | [illegible] | [illegible] 400 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x [illegible] | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | ST [illegible] |
| | DUS-2 | 1 | [illegible] | ST [illegible] |
| CONNECTION BAR | CB1 | 4 | 1" ⌀ x [illegible] | ST 400 |
| | CB4 | 6 | 1" ⌀ x [illegible] | ST 400 |
| CONNECTION PLATES | [illegible] | [illegible] | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |

NOTES: (1) [illegible] ARC WELD [illegible]
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" [illegible]

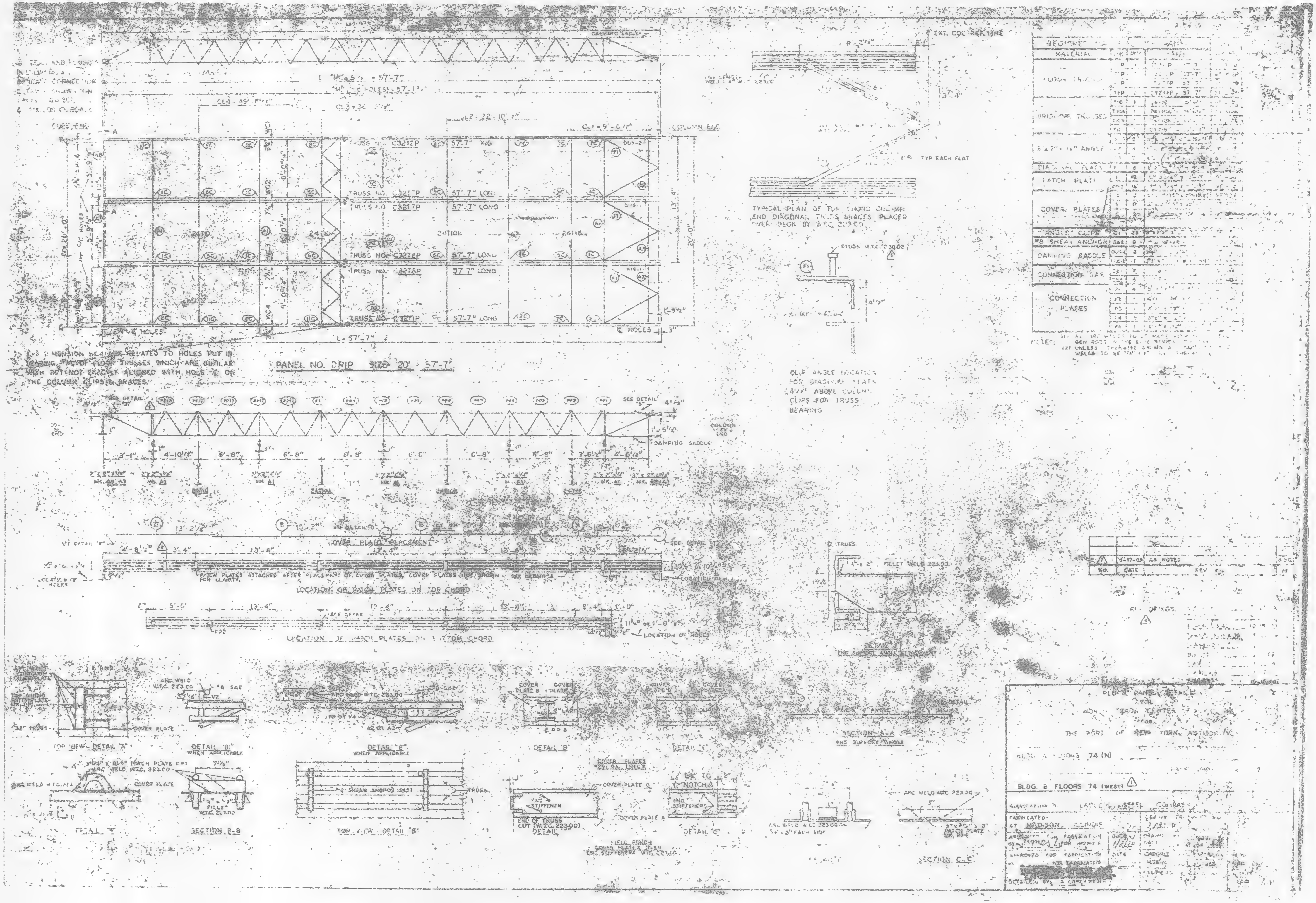
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| △1 | 6-17-69 | AS NOTED | G.D.C. |

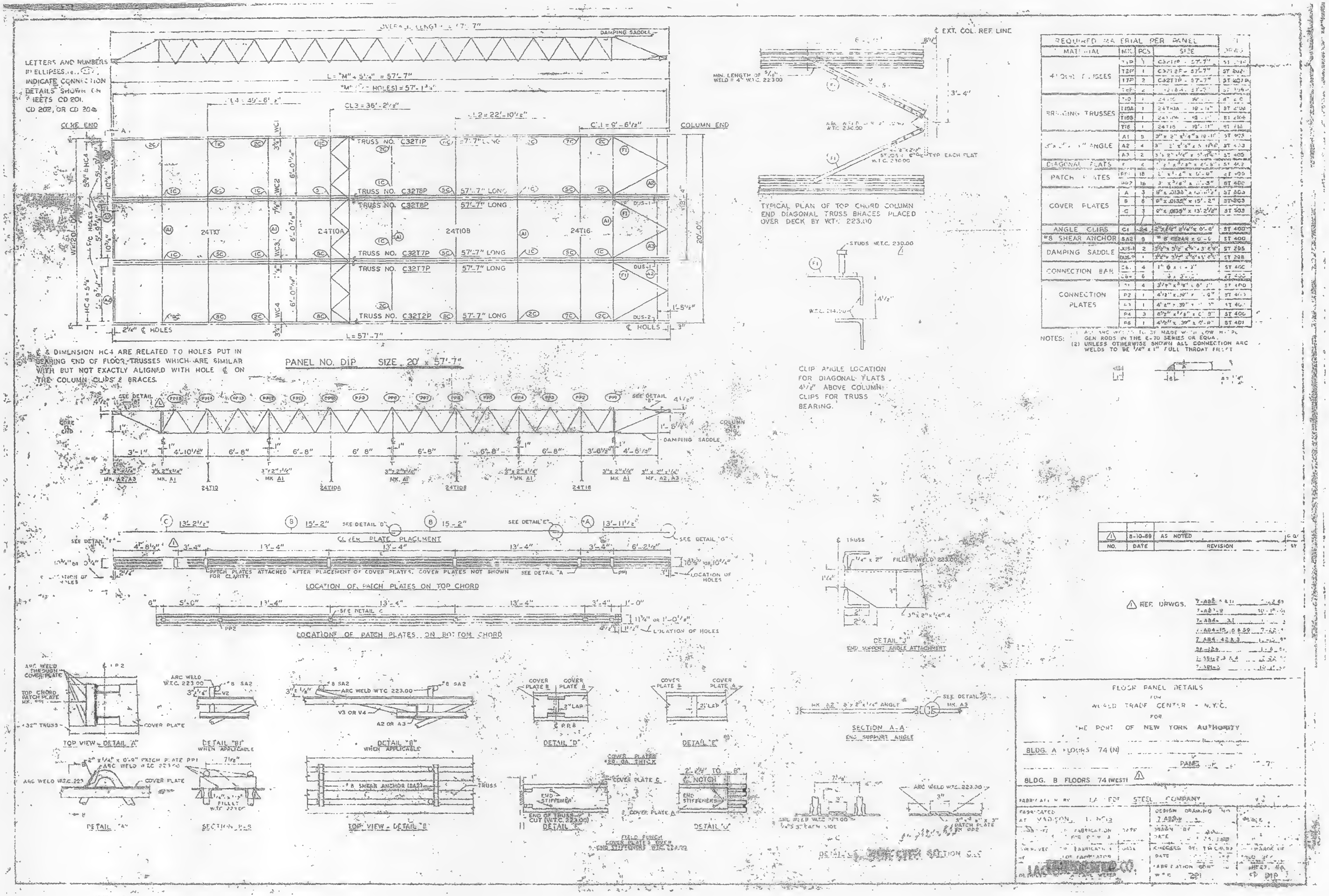
△1 REF. DRWGS. 7-A82-53 ... 22-68
7-A83-10 ... 10-[illegible]
7-A84-3 & 42 ... 10-15-[illegible]
4-A85-1?, 15 & 30 ... [illegible]
7-A81-3 ... [illegible]
AA-124 ... 6-69
7-[illegible] ... 22-68
[illegible] ... 22-68
7-A81-8 ... 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
[illegible]
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-46 (N)
[illegible] DRIK 8 6
BLDG. B FLOORS 45-46 (WEST) △1

FAB. [illegible] [illegible] STEEL COMPANY
FABRICATED AT MADISON [illegible]
APPROVED FOR FABRICATION [illegible] DATE [illegible]
DRAWN [illegible] DATE JULY [illegible] 1968
CHECKED [illegible] DATE OCT. 31, 1968
[illegible] DRIK

DAMPING SADDLE
EXT. COL. REF. LINE
CL4 = 45'-5¼"
CL3 = 30'-2"
L2 = 22'-10¼"
C1 = 9'-6¾"
COLUMN EDGE
TRUSS NO. C32T1P 57'-7" LONG
TRUSS NO. C32T7P 57'-7" LONG
TRUSS NO. C32T8P 57'-7" LONG
TRUSS NO. C32T6P 57'-7" LONG
TRUSS NO. C32T1P 57'-7" LONG
24T10b
24116
20'-0"
L = 57'-7"
℄ HOLES
DIMENSION BC4 ARE RELATED TO HOLES PUT IN BEARING ANGLE OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIP SIZE 20' x 57'-7"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
TYP EACH FLAT
STUDS W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING
SEE DETAIL
DAMPING SADDLE
COLUMN EXT. END
3'-1" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-6½"
13'-2½"
COVER PLATE PLACEMENT
4'-8½" 3'-4" 13'-4" 13'-4"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
5'-0" 13'-4" 13'-4" 13'-4" 8'-4"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
BEARING PLATES
MATERIAL
FLOOR TRUSSES
BRIDGING TRUSSES
DIAGONAL FLATS
PATCH PLATE
COVER PLATES
ANGLE CLIPS
#8 SHEAR ANCHOR
DAMPING SADDLE
CONNECTION BAR
CONNECTION PLATES
NOTES:
1 6-17-03 AS NOTED
NO. DATE REV.
DRAWINGS
ARC WELD W.T.C. 223.00
#8 SAZ
TOP VIEW DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "B"
DETAIL "C"
SECTION A-A END SUPPORT ANGLE
COVER PLATE B
COVER PLATE
DETAIL "A"
SECTION B-B
#8 SHEAR ANCHOR (SAZ)
TRUSS
TOP VIEW DETAIL "B"
COVER PLATES 20 GA. THICK
COVER PLATE C
END STIFFENER
END OF TRUSS CUT (W.T.C. 223.00) DETAIL
FIELD PUNCH COVER PLATES WHEN END STIFFENERS W.T.C. 223.00
NOTCH
END STIFFENERS
DETAIL "E"
ARC WELD W.T.C. 223.00
SECTION C-C
PATCH PLATE
FLOOR PANEL DETAILS
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 74 (N)
7
BLDG. B FLOORS 74 (WEST) ⚠1
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION
APPROVED FOR FABRICATION
DATE
DRAWN
CHECKED
[redacted]
DETAILED BY A. CARLSMITH


OVERALL LENGTH = 57'-7"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e., INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
L = "M" + 5'-4" = 57'-7"
"M" (HOLES) = 57'-1¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1P 57'-7" LONG
TRUSS NO. C32T8P 57'-7" LONG
TRUSS NO. C32T8P 57'-7" LONG
TRUSS NO. C32T7P 57'-7" LONG
TRUSS NO. C32T7P 57'-7" LONG
TRUSS NO. C32T2P 57'-7" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
DUS-1
DUS-2
20'-0"
2¼" ℄ HOLES
℄ HOLES
L = 57'-7"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. D1P SIZE 20' x 57'-7"
SEE DETAIL
PP13 PP14 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
COLUMN END
DAMPING SADDLE
3'-1" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-6½"
MK. A2, A3
MK. A1
24T10 24T10A 24T10B 24T16
13'-2½" 15'-2" 15'-2" 13'-11½"
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
13'-4"
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION P-P
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
ARC WELD W.T.C. 223.00
#8 SA2
#8 SHEAR ANCHOR (SA2)
COVER PLATE
COVER PLATE B
COVER PLATE A
COVER PLATE C
2" LAP
END STIFFENERS
END OF TRUSS CUT (W.T.C. 223.00)
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
℄ EXT. COL. REF. LINE
MIN. LENGTH OF WELD = 4" W.T.C. 223.00
3'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
FILLET WELD 223.00
SECTION A-A END SUPPORT ANGLE
MK. A2 3" x 2" x ¼" ANGLE
SEE DETAIL MK. A3
ARC WELD W.T.C. 223.00
PATCH PLATE PP2

| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | DRWG |
| FLOOR TRUSSES | T1P | 1 | C32T1P - 57'-7" | ST 201P |
| | T2P | 1 | C32T2P - 57'-7" | ST 202P |
| | T7P | 2 | C32T7P - 57'-7" | ST 207P |
| | T8P | 2 | C32T8P - 57'-7" | ST 208P |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| DIAGONAL FLATS | F | 6 | [illegible] | ST 442 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 1'-3" | ST 400 |
| COVER PLATES | A | 3 | 8" x .0135" x 13'-11½" | ST 503 |
| | B | 6 | 8" x .0135" x 15'-2" | ST 503 |
| | C | 3 | 8" x .0135" x 13'-2½" | ST 503 |
| ANGLE CLIPS | C1 | 24 | 2" x 2" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-6 | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | C6 | 4 | 1" ⌀ x 1'-3" | ST 400 |
| | C6A | 6 | [illegible] x 3'-3" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅝" x 0'-7" | ST 400 |
| | P2 | 1 | 4½" x .39" x 1'-6" | ST 401 |
| | P3 | 1 | 4½" x .39" x 1'-3" | ST 401 |
| | P4 | 3 | 6½" x ⅞" x 0'-9" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-8" | ST 401 |

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

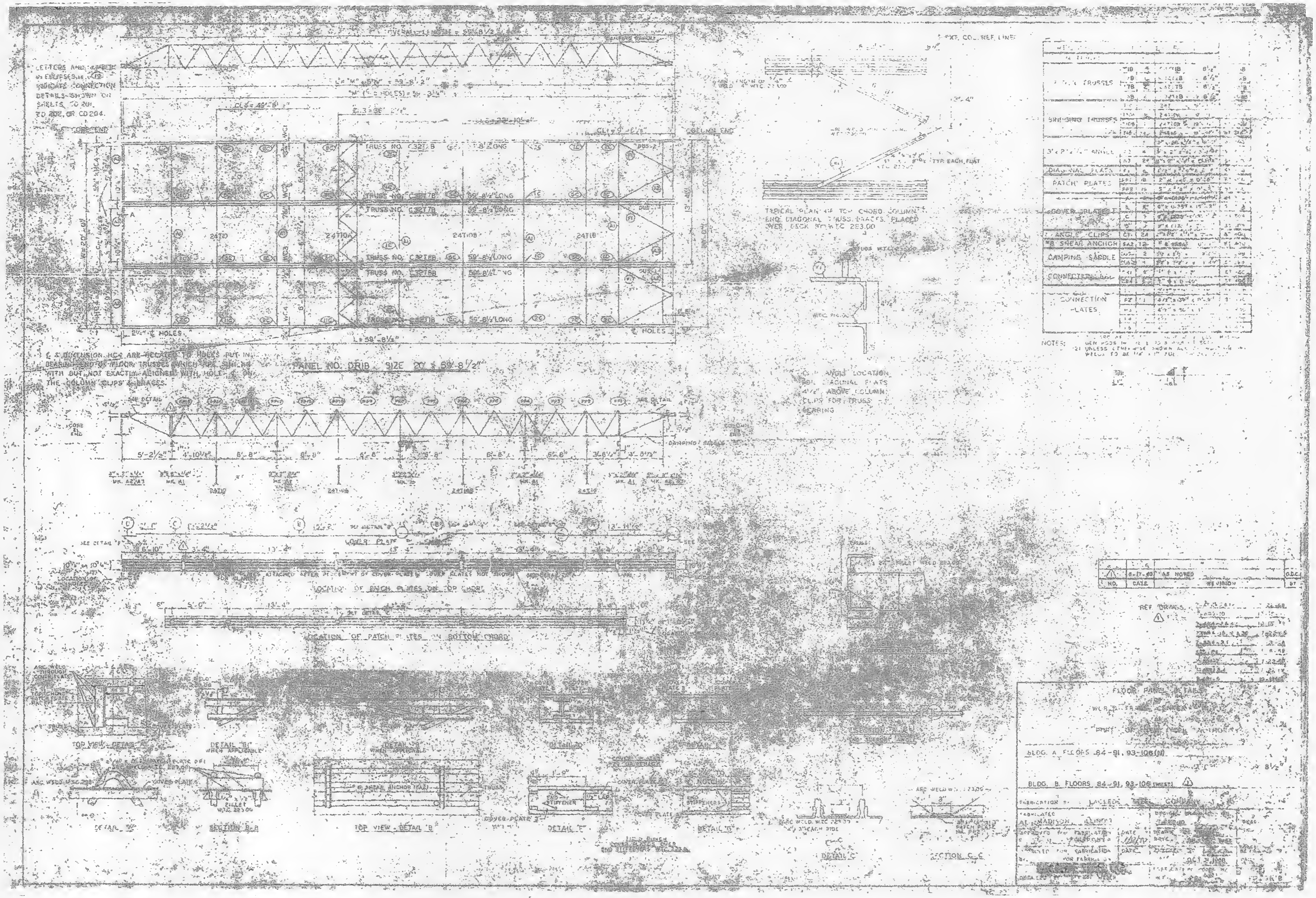
| NO. | DATE | REVISION |
|---|---|---|
| 1 | 8-10-69 | AS NOTED |

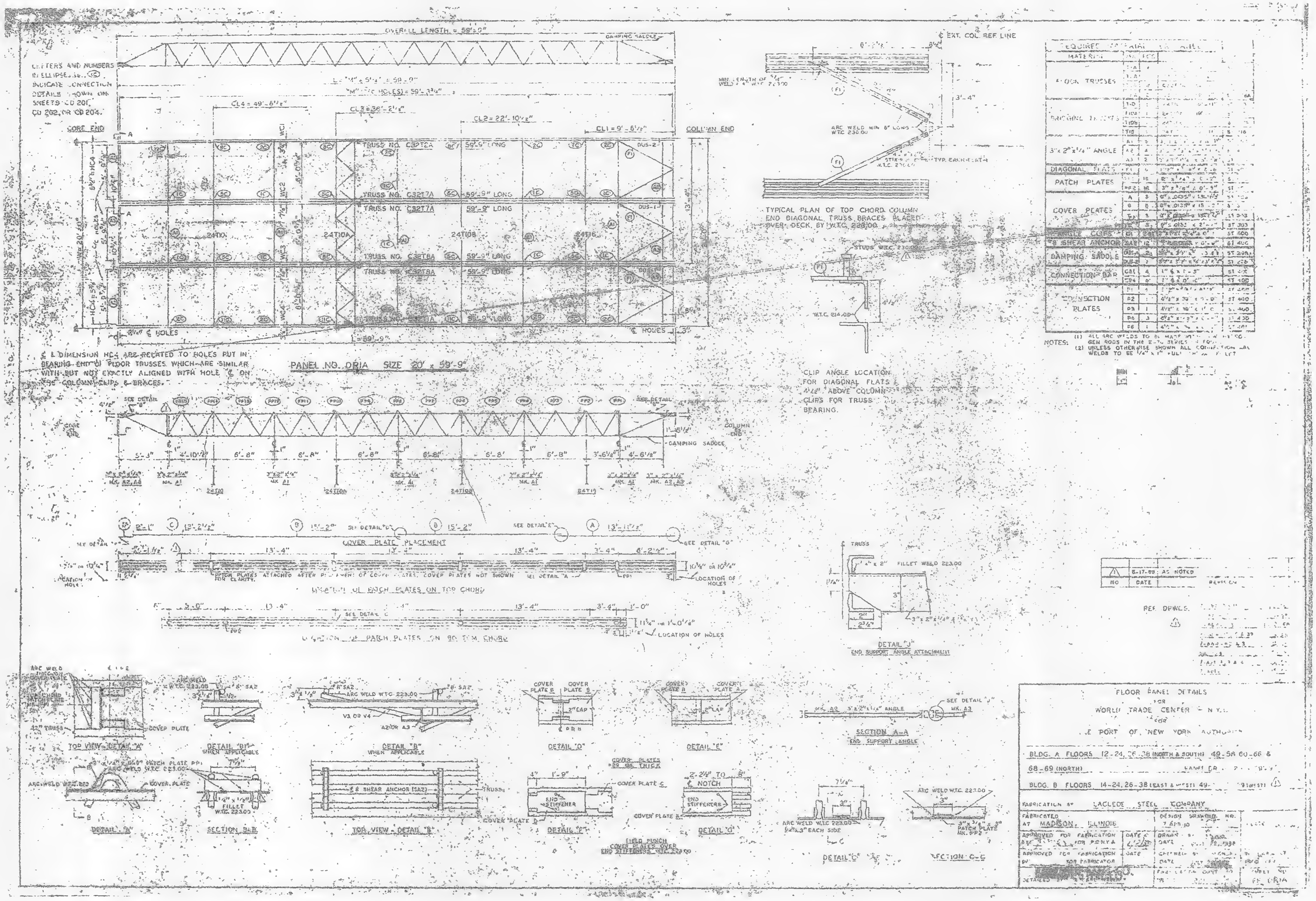
1 REF. DRWGS.
7-AB4-... 
7-AB4-15, 8 & 59 7-22-...
7-AB4-42 & 3
SA-124
7-AB4-...

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N)
PANEL D1P ... 57'-7"
BLDG. B FLOORS 74 (WEST) 1

FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB4-...
DRAWN BY
DATE ... 24, 1969
CHECKED BY: T.H.C.
APPROVED FOR FABRICATION BY FOR FABRICATOR
LACLEDE STEEL CO.
FABRICATION CONT. W.T.C. 221
SHEET NO. CD D1P


LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.
CORE END
COLUMN END
TRUSS NO. C3217B
TRUSS NO. C3217B 59'-8½" LONG
TRUSS NO. C3218B 59'-8½" LONG
59'-8½" LONG
24T10
24T10A
24T10B
24T1B
2¼" ℄ HOLES
℄ HOLES
L=59'-8½"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIB SIZE 20' x 59'-8½"
SEE DETAIL
DAMPING SADDLE
5'-2½"
4'-10½"
6'-8"
3'-8½"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK W.T.C. 233.00
TYP. EACH FLAT
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING
FLOOR TRUSSES
BRIDGING TRUSSES
3" x 2½" x ¼" ANGLE
DIAGONAL FLATS
PATCH PLATES
COVER PLATES
ANGLE CLIPS
#8 SHEAR ANCHOR
DAMPING SADDLE
CONNECTION
CONNECTION PLATES
NOTES:
(2) UNLESS OTHERWISE SHOWN ALL WELDS TO BE
LOWER PLATE
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
13'-4"
5'-0"
1/8-17-69 AS NOTED
NO. DATE REVISION BY
REF. DRWGS.
TOP VIEW DETAIL "A"
DETAIL "B" WHEN APPLICABLE
DETAIL "A"
SECTION B-B
TOP VIEW DETAIL "B"
DETAIL "E"
DETAIL "D"
DETAIL "C"
SECTION C-C
#8 SHEAR ANCHOR
COVER PLATE
END STIFFENER
STIFFENERS
FILLET
FLOOR PANEL DETAILS
WORLD TRADE CENTER
BLDG. A FLOORS 84-91, 93-106(N)
BLDG. B FLOORS 84-91, 93-106(WEST) 1
8½"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON ILLINOIS
APPROVED FOR FABRICATION
DATE
OCT 31 1968



| REQUIRED MATERIAL [illegible] | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | | |
| FLOOR TRUSSES | [illegible] | [illegible] | [illegible] | [illegible] |
| BRIDGING TRUSSES | T10 | 1 | [illegible] | [illegible] |
| | T10A | 1 | [illegible] | [illegible] |
| | T10B | [illegible] | [illegible] | [illegible] |
| | T19 | [illegible] | [illegible] | 8 16 |
| 3"x2"x¼" ANGLE | A1 | 5 | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | [illegible] |
| | A3 | 2 | [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST [illegible] |
| PATCH PLATES | PP1 | 16 | [illegible] | [illegible] |
| | PP2 | 16 | 3"x3/8"x0'-9" | ST [illegible] |
| COVER PLATES | A | 3 | 6"x.0135"x13'-11½" | ST 303 |
| | B | 8 | 6"x.0135"x15'-2" | ST 303 |
| | C | 3 | [illegible] | ST 303 |
| | D | 3 | 6"x.0135"x2'-[illegible] | ST 303 |
| ANGLE CLIPS | C1 | [illegible] | [illegible] | ST 400 |
| 5/8 SHEAR ANCHOR | SA2 | 12 | [illegible] | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | ST 2[illegible] |
| | DUS-2 | 1 | [illegible] | ST [illegible] |
| CONNECTION BAR | CB1 | 4 | 1" φ x 1'-3" | ST [illegible] |
| | CB4 | 6 | 1" φ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | [illegible] | ST 400 |
| | P2 | 1 | 4½" x 3/8" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x 3/8" x 1'-0" | ST 400 |
| | P4 | 3 | [illegible] | ST 400 |
| | P6 | 1 | [illegible] | ST 400 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES [illegible]
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL [illegible] FILLET

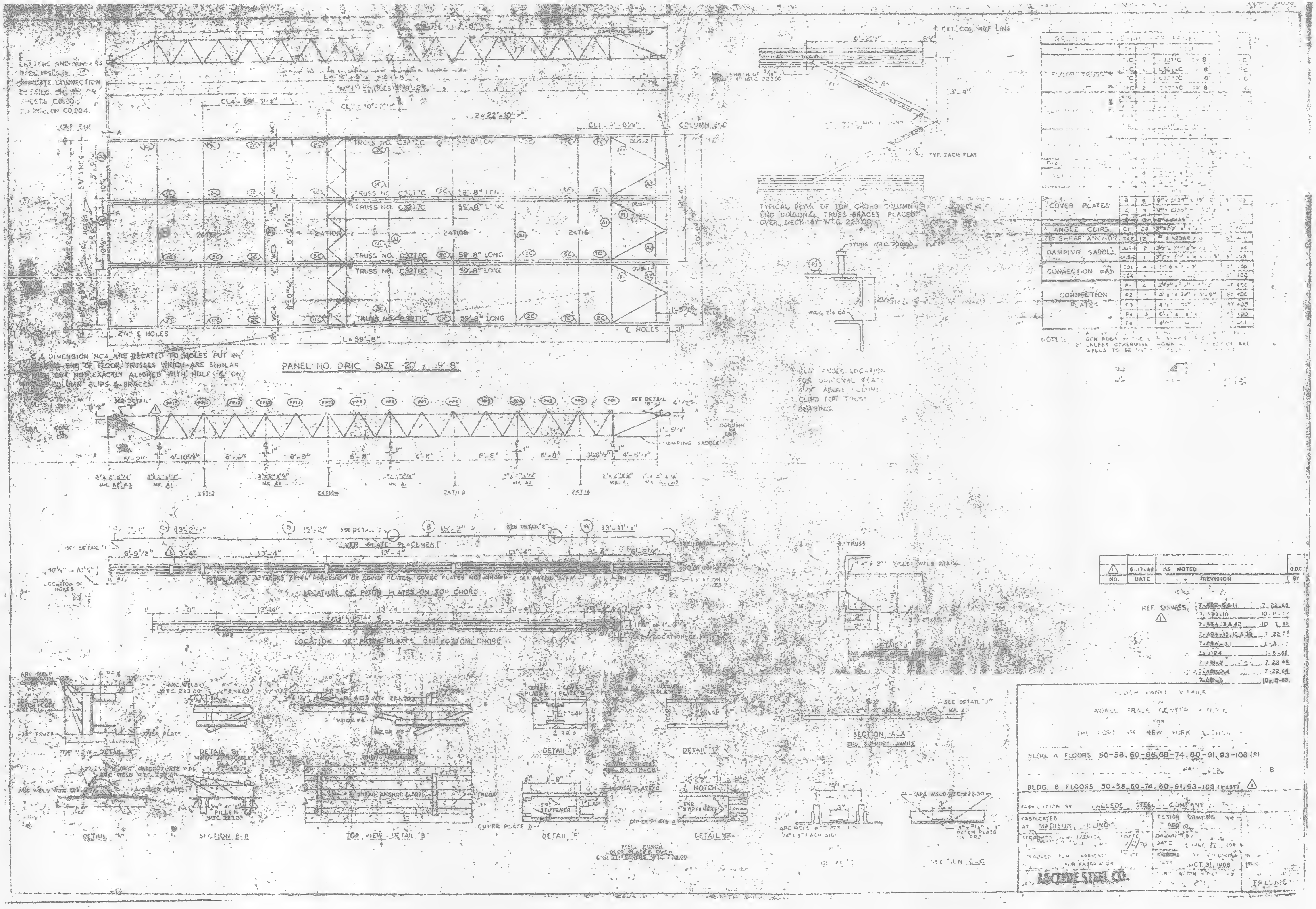
| NO | DATE | REVISION |
|---|---|---|
| 1 | 8-17-69 | AS NOTED |

REF. DRWGS. [illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58 60-66 &
68-69 (NORTH) PANEL DR [illegible]
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-[illegible] (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. [illegible]
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A DATE [illegible]
DRAWN BY [illegible] DATE [illegible] 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE JULY [illegible]
DETAILED BY [illegible]
SHEET NO. PF DR1A



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| △1 | 6-17-69 | AS NOTED | G.D.C |

REF. DRWGS. △1

| | |
|---|---|
| 7-AB2-6&11 | 7-22-68 |
| 7-AB3-10 | 10-[illegible] |
| 7-AB4-3&42 | 10-[illegible] |
| 7-AB4-13,16&39 | 7-22-[illegible] |
| 7-2B4-3.1 | 1-3-[illegible] |
| 24J124 | 1-6-69 |
| 7-AB1-2 | 7-22-65 |
| 7-ABR-3,4 | 7-22-68 |
| 7-AB1-8 | 10-15-68 |

FLOOR PANEL DETAILS

WORLD TRADE CENTER

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 80-91, 93-108 (S)

8

BLDG. B FLOORS 50-58, 60-74, 80-91, 93-108 (EAST) △1

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB8-10

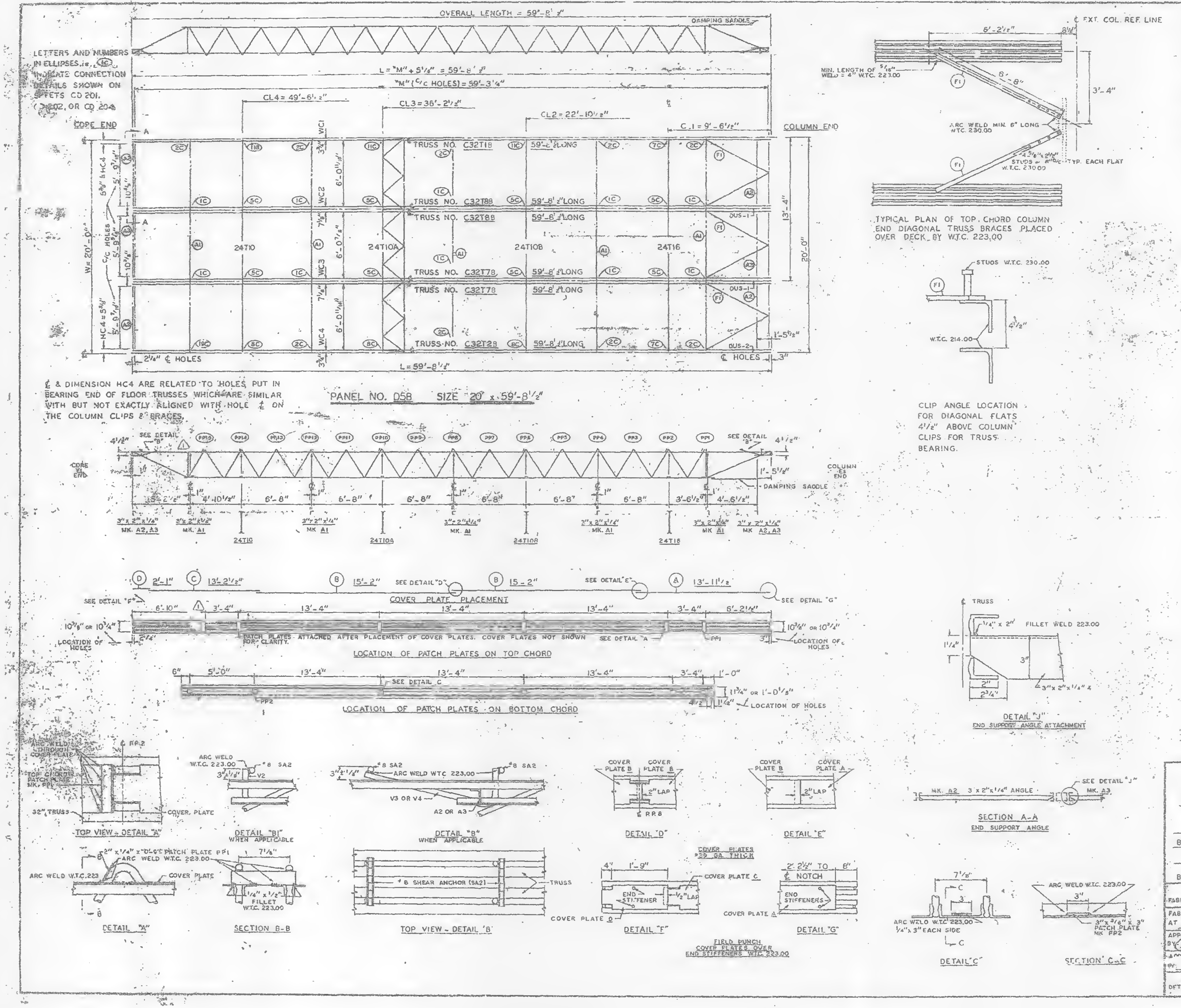
DATE 1/2/70

DATE JULY 21, 1968

CHECKED

DATE OCT. 31, 1968

LACLEDE STEEL CO.


OVERALL LENGTH = 59'-8' 2"
DAMPING SADDLE
L = "M" + 5 1/4" = 59'-8' 2"
"M" (C/C HOLES) = 59'-3 1/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
C.1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T18 59'-8 1/2" LONG
TRUSS NO. C32T88 59'-8 1/2" LONG
TRUSS NO. C32T88 59'-8 1/2" LONG
TRUSS NO. C32T78 59'-8 1/2" LONG
TRUSS NO. C32T78 59'-8 1/2" LONG
TRUSS NO. C32T28 59'-8 1/2" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
W = 20'-0"
C/C HOLES
HC4 = 5 3/8"
2 1/4" ℄ HOLES
℄ HOLES
L = 59'-8 1/2"
13'-4"
20'-0"
1'-5 1/2"
3"
DUS-1
DUS-2
PANEL NO. D58 SIZE 20' x 59'-8 1/2"
SEE DETAIL "B"
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
COLUMN ℄ END
DAMPING SADDLE
3"x 2"x 1/4" MK. A2, A3
3"x 2"x 1/4" MK. A1
24T10
24T10A
24T10B
24T16
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL 'B'
DETAIL "F"
DETAIL "G"
#8 SHEAR ANCHOR (SA2)
ARC WELD W.T.C. 223.00
COVER PLATE
EN0 STIFFENERS
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
COVER PLATES #30 GA THICK
¢ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN. 6" LONG W.T.C. 230.00
STUDS @ 8" O/C TYP. EACH FLAT W.T.C. 230.00
F1
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
FILLET WELD 223.00
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
MK. A2 3 x 2" x 1/4" ANGLE
SEE DETAIL "J"
DETAIL "C"
SECTION C-C
PATCH PLATE MK PP2

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T18 | 1 | C32T18 - 59'-8 1/2" | ST 201B |
| | T28 | 1 | C32T28 - 59'-8 1/2" | ST 202B |
| | T78 | 2 | C32T78 - 59'-8 1/2" | ST 207B |
| | T88 | 2 | C32T88 - 59'-8 1/2" | ST 208B |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x 2"x 1/4" x 19'-1" | ST 402 |
| | A2 | 4 | 3"x 2"x 1/4" x 5'-11 5/8" | ST 403 |
| | A3 | 2 | 3"x 2"x 1/4" x 5'-11 5/8" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/16" x 2'-8" | ST 402 |
| PATCH PLATES | PP | 10 | 2" x 1/4" x 0'-6" | ST 400 |
| | PP2 | 18 | 3" x 5/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 8" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 8" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 8" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 8" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 5'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ɸ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 1/2" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P8 | 1 | 4 1/2" x .39" x 0' 9" | ST 401 |

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| 2 | 7-1-69 | AS NOTED | G.D.[illegible] |
| 1 | 3-11-69 | AS NOTED | G.D.[illegible] |

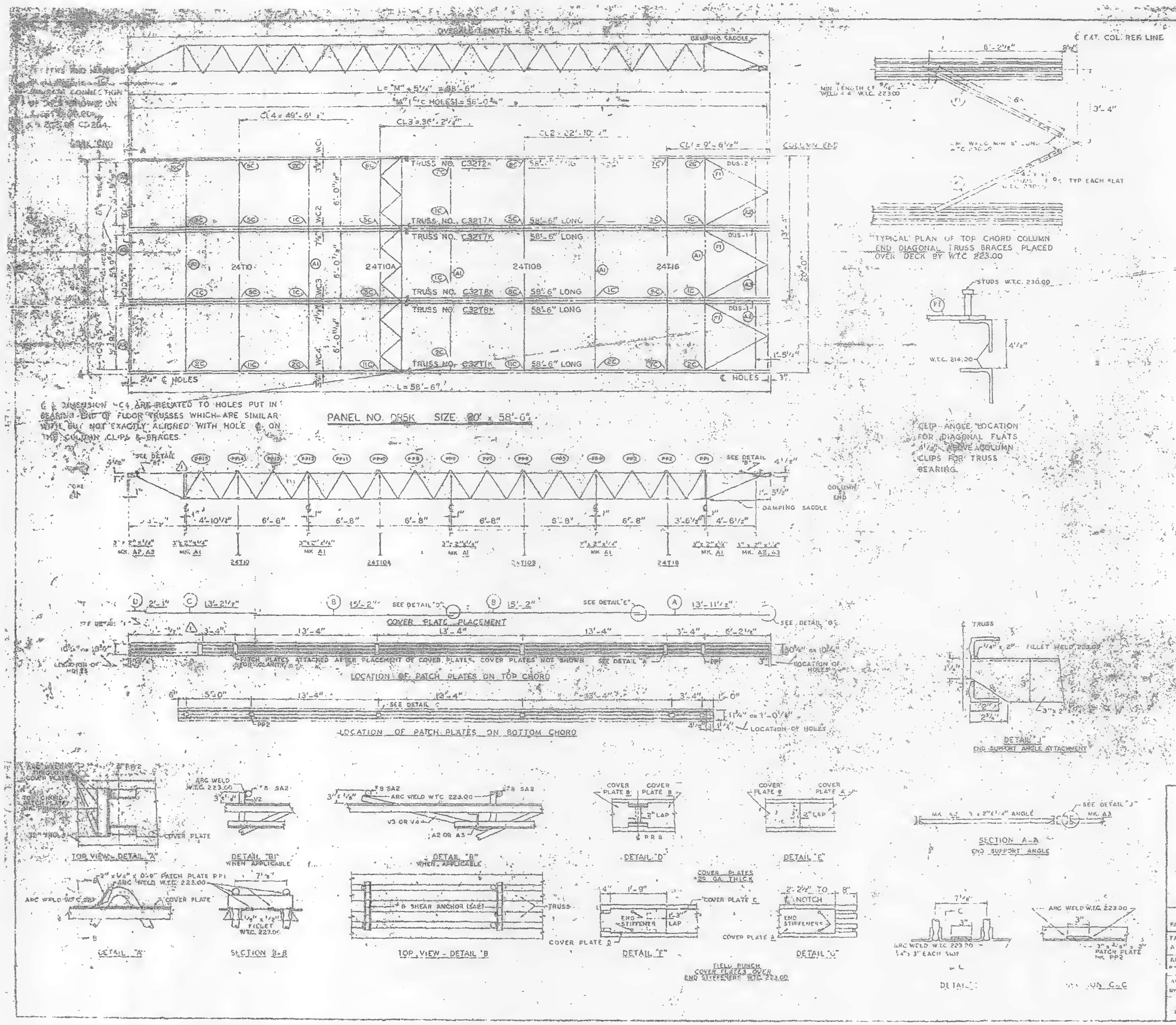
REF. DRWGS.
7-A82-6 & 11 7-22-68
7-A83-71 11-25-68
7-A84-3 10-15-68
7-A84-15 & 18 7-22-68
7-A84-42 10-1-68
SA-124 10-11-68
7-A81-[illegible] 10-15-68
7-A81-[illegible] 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A. FLOORS B3 (NORTH)
PANEL D58 - 20' x 59'-8 1/2"
BLDG. B FLOORS B3 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-71 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] P.N.Y.A | DATE [illegible] | DRAWN BY [illegible] DATE JAN 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA DATE JAN 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY [illegible] | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP D58 |



| REQUIRED MATERIAL PER PANEL | | | | REF. DRWGS. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1K | 1 | C32T1K - 58'-6" | ST 201K |
| | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T7K | 2 | C32T7K - 58'-6" | ST 207K |
| | T8K | 2 | C32T8K - 58'-6" | ST 208K |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-1" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T18 | 1 | 24T18 - 19'-[illegible] | ST 218 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 10'-[illegible] | [illegible] |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-[illegible] | ST 303 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-[illegible] | ST [illegible] |
| DIAGONAL FLATS | F1 | 8 | 1 1/2" x 3/8" x 8'-[illegible] | ST [illegible] |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x [illegible]-8" | ST 400 |
| | PP2 | 18 | 3" x 3/4" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 3 | 9" x .0135" x 45'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ⌀ x 1'-3" | ST 400 |
| | CB4 | 6 | 3/4" ⌀ x [illegible] 10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3/8" x 9/16" x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-[illegible] | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

a = 1/8"
b = 1/4"

| NO. | DATE | REVISION | |
|---|---|---|---|
| | | | |
| 2 | 7-1-68 | AS NOTED | G.D. |
| 1 | 3-11-68 | AS NOTED | G.G. |

REF DRWGS.

| | |
|---|---|
| 7-AB3-5 & 11 | 7-12-68 |
| 7-AB3-[illegible] | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-16 & 18 | 9-26-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-5 | 10-15-80 |
| 7-AB1-2 & 4 | 7-22-68 |

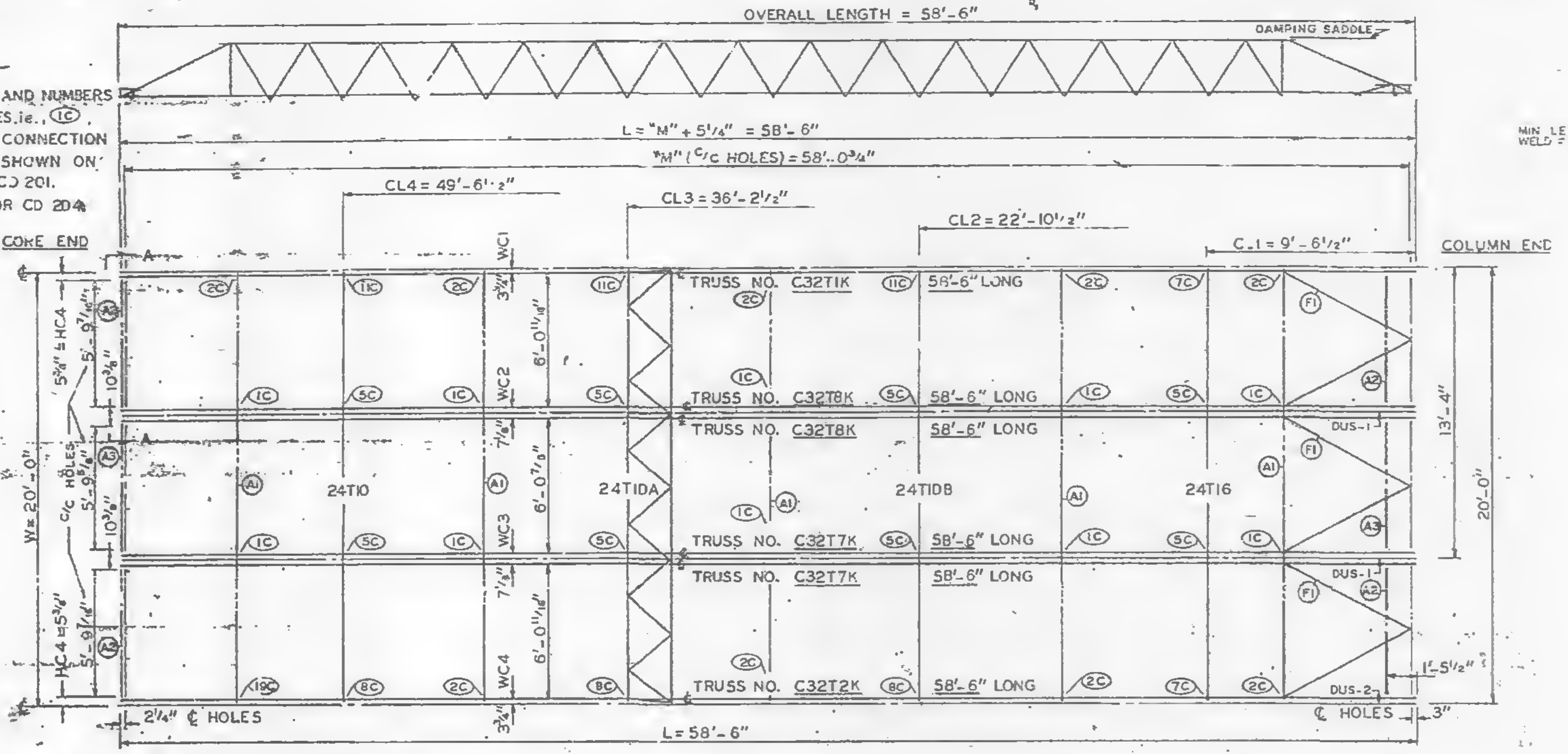
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 & 46 (SOUTH)
PANEL DR5K
BLDG. B FLOORS 45 & 46 (EAST) ②

FABRICATION BY LACLEDE STEEL COMPANY

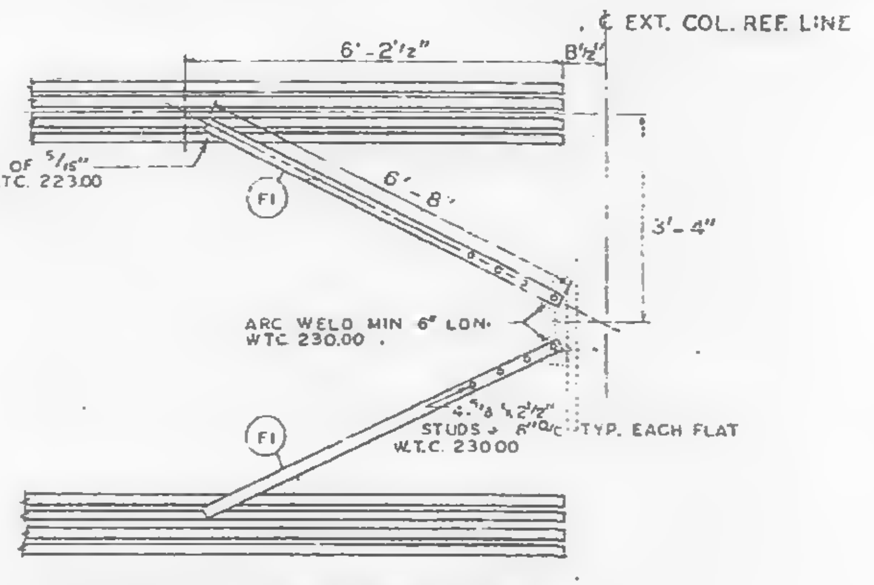
| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-AB3-32 4-1-68 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.N.Y.A. DATE 1/12/70 | DRAWN BY [illegible] DATE JAN 4 1969 | |
| APPROVED FOR FABRICATION BY [illegible] DATE | CHECKED BY T.M.CHIRA DATE [illegible] 14 1969 | IN CHARGE OF PROD. [illegible] |
| DETAILED BY CARL WEBER | FABRICATION CONT. NO. [illegible] 221 | SHEET NO. FD [illegible] 5K |

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

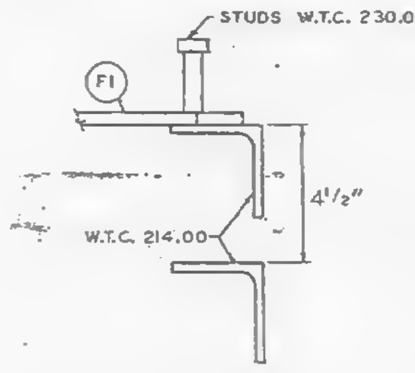


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

## PANEL NO. D5K SIZE 20' x 58'-6"


℄ EXT. COL. REF. LINE
6'-2½"
8½"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN 6" LON. WTC 230.00
4-5/8 x 2½" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00

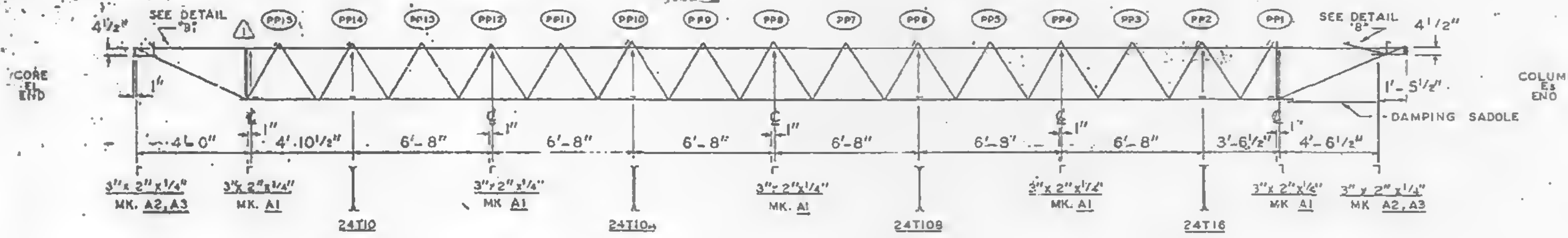
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

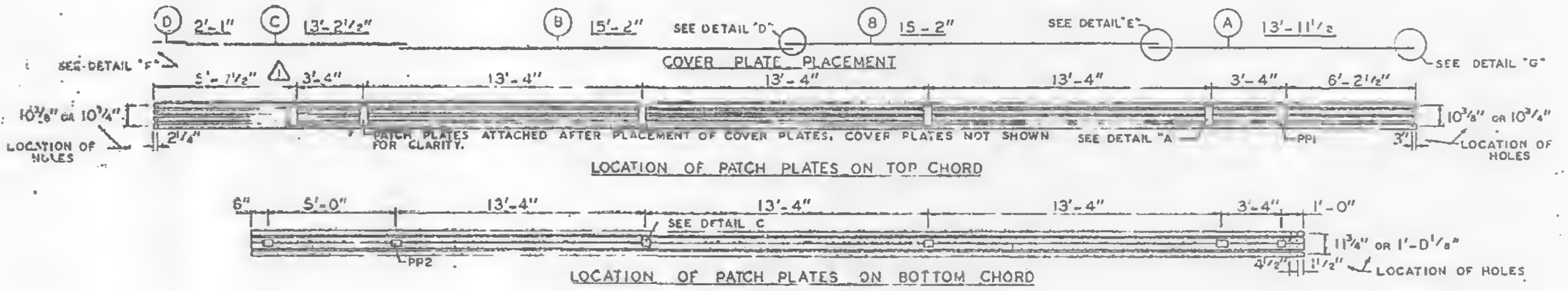


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T1K | 1 | C32T1K - 58'-6" | ST 201K |
| | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T7K | 2 | C32T7K - 58'-6" | ST 207K |
| | T8K | 2 | C32T8K - 58'-6" | ST 208K |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3"x 2" x¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼" x 5'-1[illegible]" | ST 403 |
| | A3 | 2 | 3"x 2"x¼" x 5'-1[illegible]" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-8" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2"x 1½" x¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x C 9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½"x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1 - 3" | ST 400 |
| | CB4 | [illegible] | [illegible] x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

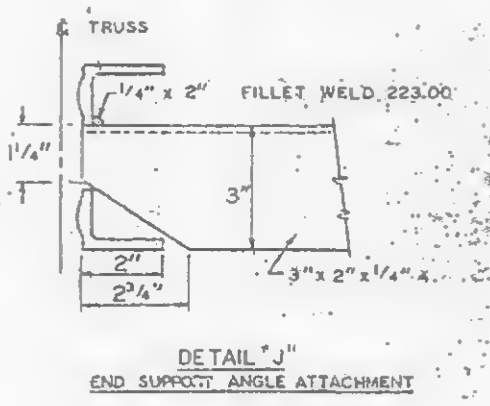
NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUA.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.





LOCATION OF PATCH PLATES ON TOP CHORD

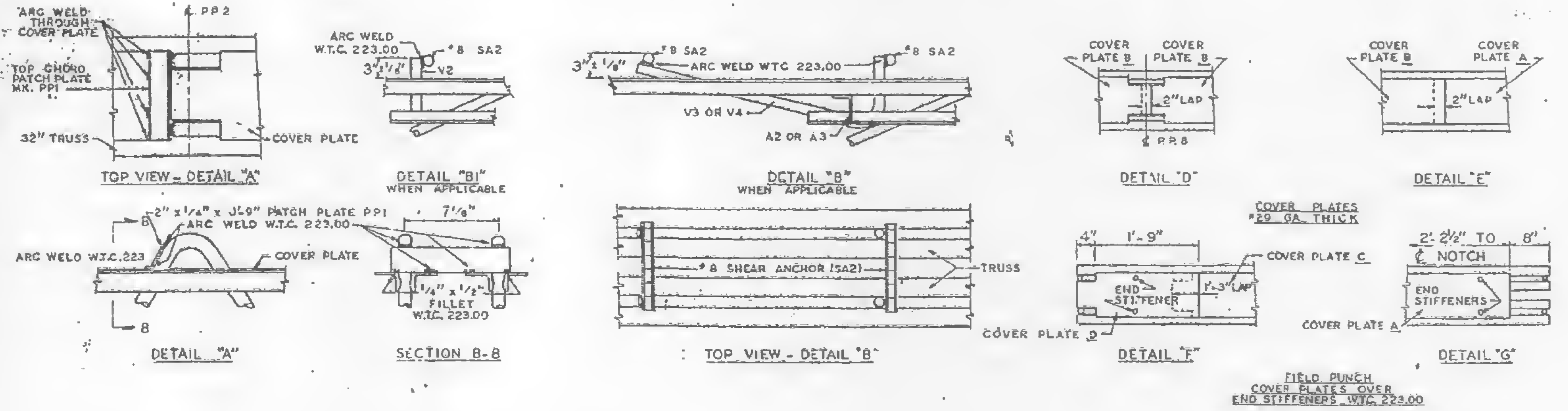
LOCATION OF PATCH PLATES ON BOTTOM CHORD



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

| | | | |
|---|---|---|---|
| ② | 7-1-69 | AS NOTED | GD |
| ① | 3-11-69 | AS NOTED | GD |
| NO. | DATE | REVISION | BY |

| REF. DRWGS. | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-71 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB8-42 | 10-15-68 |
| SE-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2 & 3 | 7-22-68 |



TOP VIEW - DETAIL "A"

DETAIL "B1" WHEN APPLICABLE

DETAIL "B" WHEN APPLICABLE

DETAIL "D"

DETAIL "E"

DETAIL "A"

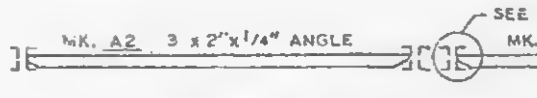
SECTION B-B

TOP VIEW - DETAIL "B"

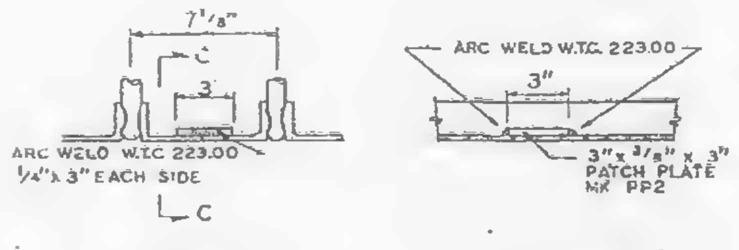
DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



SECTION A-A
END SUPPORT ANGLE


7⅛"
3
ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
C
ARC WELD W.T.C. 223.00
3"
3" x ⅜" x 3" PATCH PLATE MK PP2

DETAIL "C"

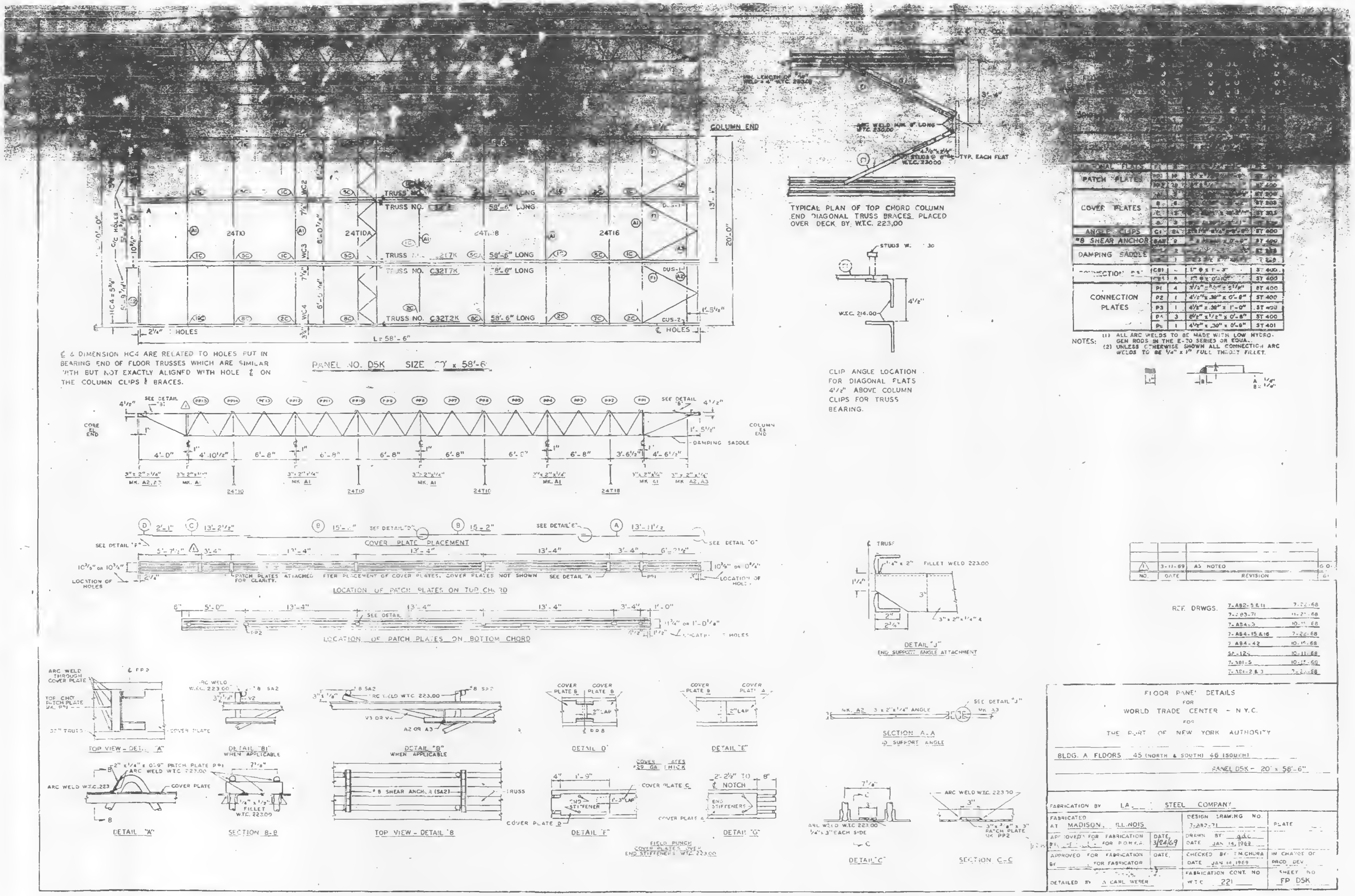
SECTION C-C

FLOOR PANEL DETAILS 1
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)
PANEL D5K 20 x 58'-6"
BLDG. B FLOORS 45 (EAST & WEST) 46 (EAST) ②

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-71 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A. | DATE | DRAWN BY: GDC DATE JAN 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M. CHURA DATE JAN 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY [illegible] | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP D5K |



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223,00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DSK SIZE 20' x 58'-6"

| | | | | |
|---|---|---|---|---|
| [illegible] PLATES | [illegible] | [illegible] | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 10 | [illegible] | ST 400 |
| | PP2 | 20 | [illegible] | ST 400 |
| COVER PLATES | [illegible] | [illegible] | [illegible] | ST 300 |
| | B | 6 | [illegible] | ST 300 |
| | C | [illegible] | [illegible] | ST 303 |
| | D | 3 | [illegible] | [illegible] |
| ANGLE CLIPS | C1 | 24 | [illegible] | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | [illegible] | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | ST 300 |
| | [illegible] | 1 | [illegible] | ST 300 |
| CONNECTION BAR | CB1 | – | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 8 | 1" ⌀ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ½" x 0'-5½" | ST 400 |
| | P2 | 1 | 4½" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P5 | 1 | 4½" x .30" x 0'-8" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | |
|---|---|---|---|
| △1 | 3-11-69 | AS NOTED | G O. |

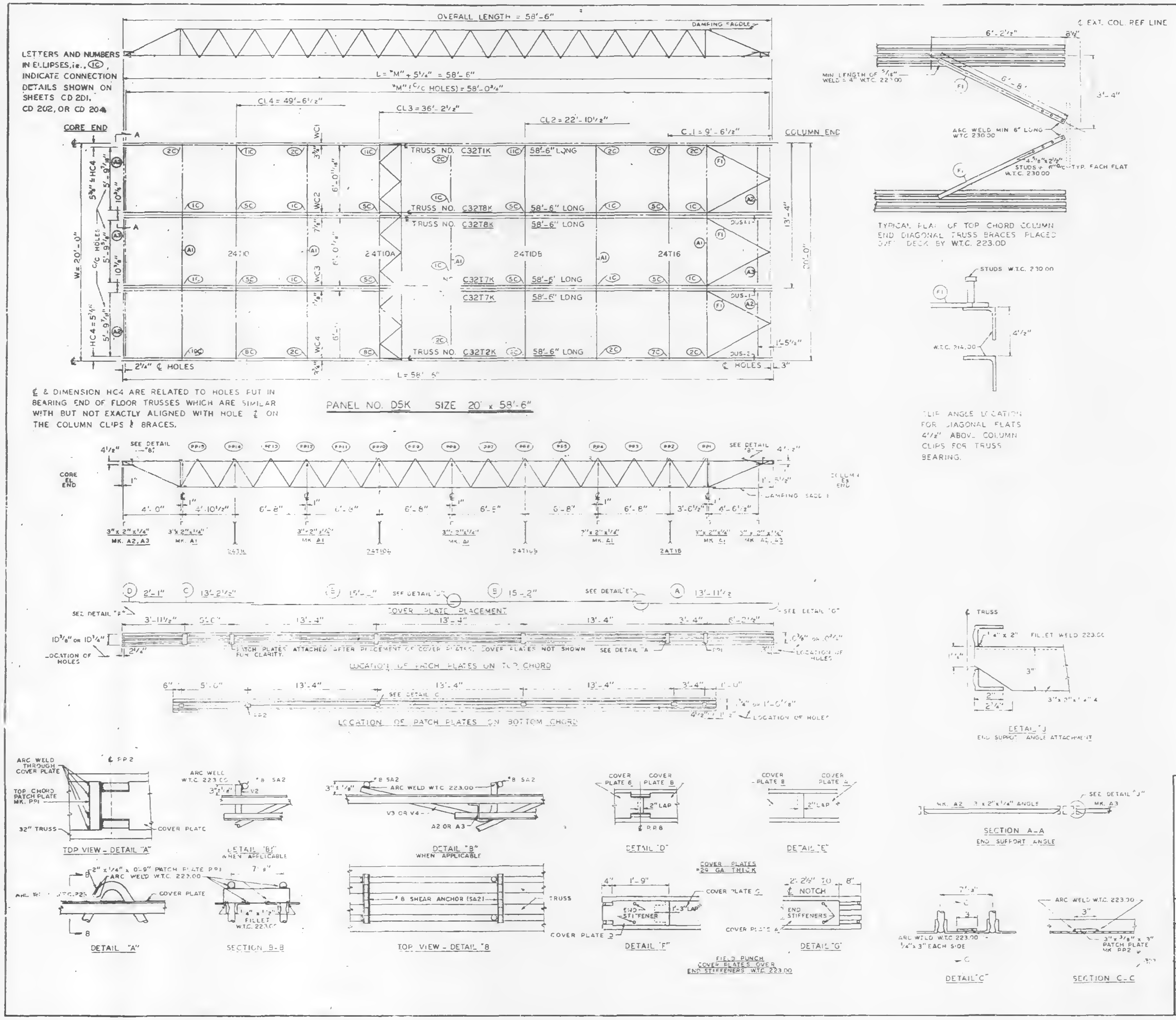
REF. DRWGS.

| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-71 | 11-21-68 |
| 7-AB4-3 | 10-11-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2 & 3 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)
PANEL DSK - 20' x 58'-6"

FABRICATION BY LA[illegible] STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-71
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 3/24/69
DRAWN BY gdc DATE JAN 14, 1969
CHECKED BY T.M.CHURA DATE JAN 14, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
IN CHARGE OF PROD. DEV.
DETAILED BY A CARL WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP DSK


OVERALL LENGTH = 58'-6"
DAMPING SADDLE
L = "M" + 5¼" = 58'-6"
"M" (C/C HOLES) = 58'-0¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
TRUSS NO. C32T8K 58'-6" LONG
C32T7K 58'-6" LONG
C32T7K 58'-6" LONG
TRUSS NO. C32T2K 58'-6" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
W = 20'-0"
HC4 = 5¾"
2¼" ℄ HOLES
℄ HOLES
L = 58'-5"
13'-4"
20'-0"
PANEL NO. D5K SIZE 20' x 58'-6"
CORE EL END
COLUMN EL END
DAMPING SADDLE
3"x 2"x ¼" MK. A2, A3
3"x 2"x ¼" MK. A1
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
6'-2½"
8½"
℄ EXT. COL. REF LINE
MIN LENGTH OF ⁵⁄₁₆" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS 4"x ⅜" Ø TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TRUSS
FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "F"
DETAIL "G"
COVER PLATES #29 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "C"
SECTION C-C

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1K | 1 | C32T1K - 58'-6" | ST 201K |
| | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T7K | 2 | C32T7K - 58'-6" | ST 207K |
| | T8K | 2 | C32T8K - 58'-6" | ST 208K |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 218 |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3"x 2"x ¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x ¼"x 5'-1⁹⁄₁₆" | ST 403 |
| | A3 | 2 | 3"x 2"x ¼"x 5'-1⁹⁄₁₆" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½"x ⅝"x 8'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x ¼"x 0'-9" | ST 400 |
| | PP2 | 16 | 3"x ⅜"x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135"x 13'-2½" | ST 303 |
| | D | 3 | 9"x .0135"x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2"x 1½"x ¼"x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x ¾"x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½"x 3½"x ¾"x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" Ø x 1-3" | ST 400 |
| | CB4 | 6 | 1" Ø x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | [illegible] | ST 400 |
| | P2 | 1 | 4½"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4½"x .39"x 1'-0" | ST 400 |
| | P4 | 3 | 6½"x ½"x 0'-8" | ST 400 |
| | P6 | 1 | 4½"x .39"x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

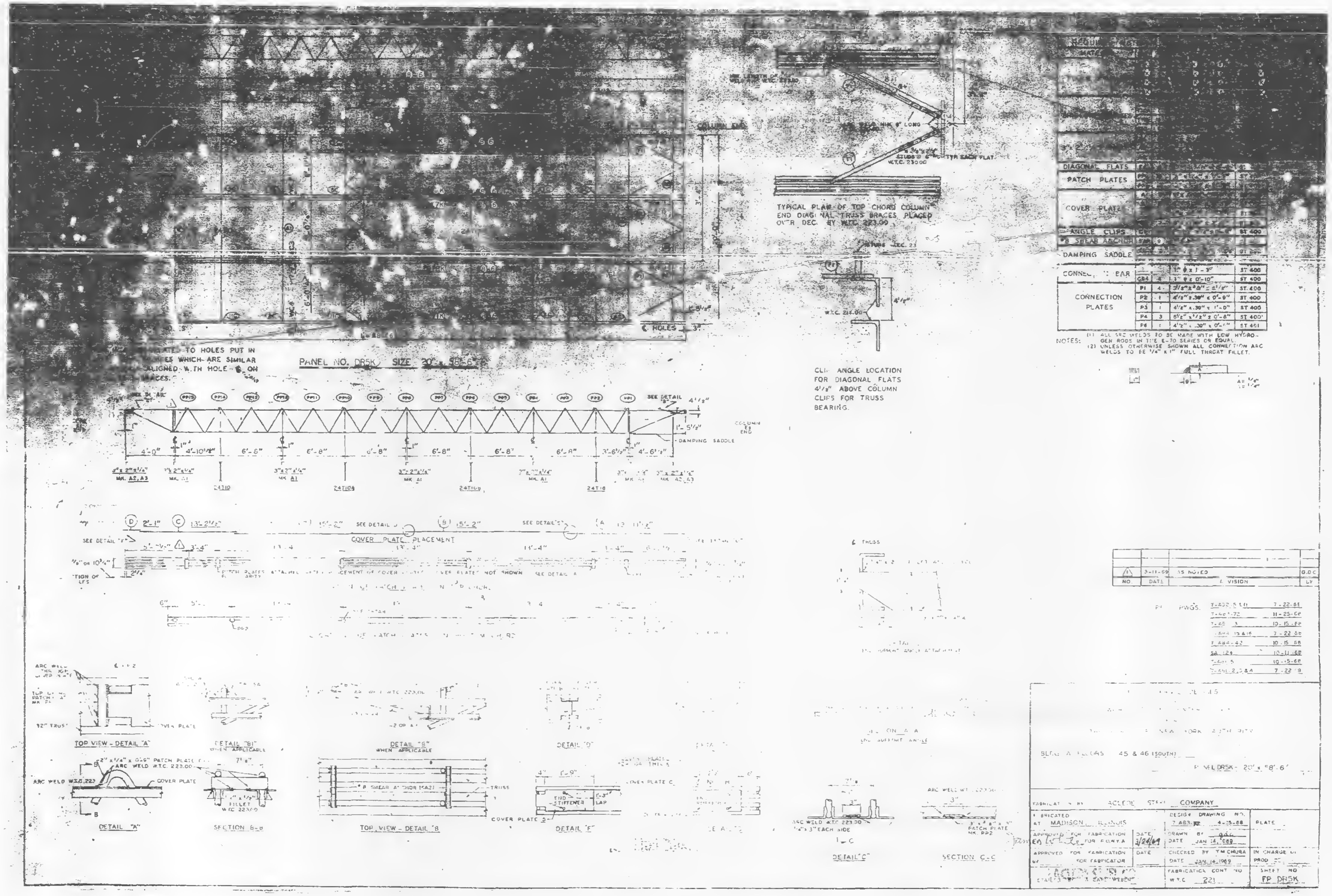
| REF. DRWGS. | |
|---|---|
| 7-AB2-5 & 11 | 7-26-68 |
| 7-AB3-71 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-26-68 |
| 7-ABA-42 | 10-15-68 |
| SC-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2 & 3 | 7-26-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

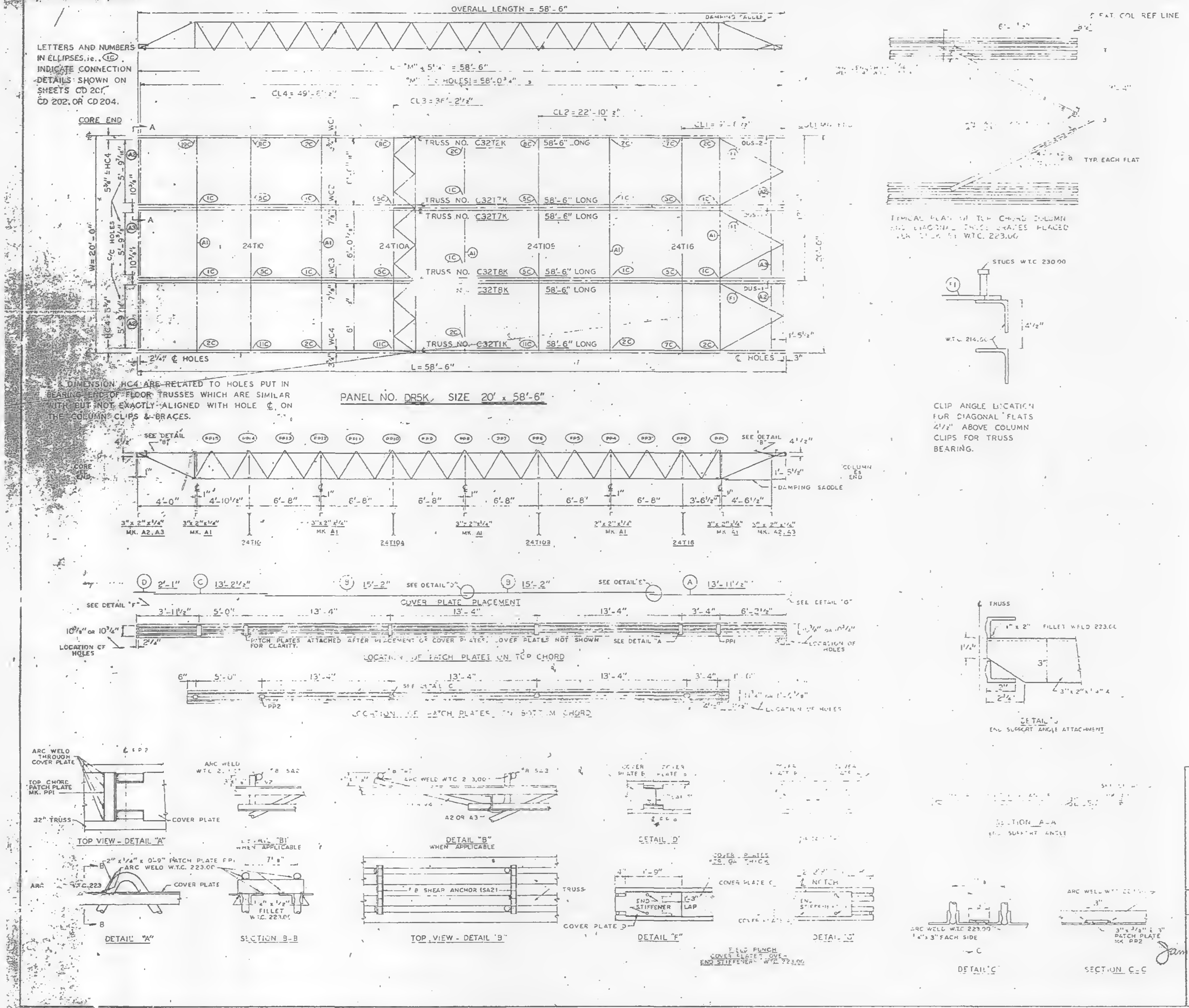
BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)
PANEL D5K - 20' x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-AB3-71 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. | DATE 2/4/69 | DRAWN BY gdc<br>DATE JAN 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA<br>DATE JAN 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP D5K |


PANEL NO. DR5K SIZE 20" x 58'-6"
PLATE TO HOLES PUT IN ... WHICH ARE SIMILAR ALIGNED WITH HOLE ... ON ... PIECES.
℄ HOLES 3"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DEC. BY W.T.C. 223.00
W.T.C. 23000
W.T.C. 216.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL
COLUMN END
DAMPING SADDLE
4'-0"
4'-10⅞"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6½"
4'-6½"
1'-5½"
4½"
MK. A2, A3
MK. A1
24T10
24T104
24T105
24T16
COVER PLATE PLACEMENT
SEE DETAIL "A"
DIAGONAL FLATS
PATCH PLATES
COVER PLATE
ANGLE CLIPS
ST 400
#8 SHEAR ANCHOR
DAMPING SADDLE
CONNECTION BAR
1" ɸ x 1'-3"
CB4
1" ɸ x 0'-10"
CONNECTION PLATES
P1
4
3⁄8" x 3⅝" x 4½"
ST. 400
P2
1
4½" x .30" x 0'-9"
P3
1
4½" x .30" x 1'-0"
P4
3
6½" x ½" x 0'-8"
ST 400'
P6
1
4½" x .30" x 0'-6"
ST 401
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.
A = ¼"
3-11-69
AS NOTED
NO
DATE
REVISION
7-A82 5 1 6
7-22-68
7-A81-72
11-25-68
7-A8 3
10-15-68
7-A84 15 & 16
7-22-68
7-A84-42
10-15-68
SA 124
10-11-68
7-A81 5
10-15-68
7-A81 2, 3 & 4
7-22-68
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
SECTION A-A
ARC WELD W.T.C. 223.00
2" x ¼" x 0'-6" PATCH PLATE
COVER PLATE
FILLET W.T.C. 223.00
#8 SHEAR ANCHOR (MAX)
TRUSS
END STIFFENER
6'-3" LAP
COVER PLATE
LINER PLATE
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "E"
DETAIL "C"
SECTION C-C
ARC WELD W.T.C. 223.00
3"
PATCH PLATE MK. PP2
BLDG. A FLOORS 45 & 46 (SOUTH)
PANEL DR5K - 20" x 58'-6"
FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.O.N.Y.A.
DATE 3/24/69
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE
DESIGN DRAWING NO. 7 A83 4-25-68
DRAWN BY
DATE JAN 14, 1969
CHECKED BY T.M. CHURA
DATE JAN. 14, 1969
FABRICATION CONT. NO. W.T.C. 221
PLATE
IN CHARGE OF PROD.
SHEET NO. FP DR5K

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.



DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR5K SIZE 20' x 58'-6"

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T1K | 1 | C32T1K - 58'-6" | ST 201K |
| | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T7K | 2 | C32T7K - 58'-6" | ST 207K |
| | T6K | 2 | C32T6K - 58'-6" | ST 208K |
| BRIDGING TRUSSE | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| [illegible] | A | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 3/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-10 7/8" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 3/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ɸ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-8" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

REF. DRWGS.

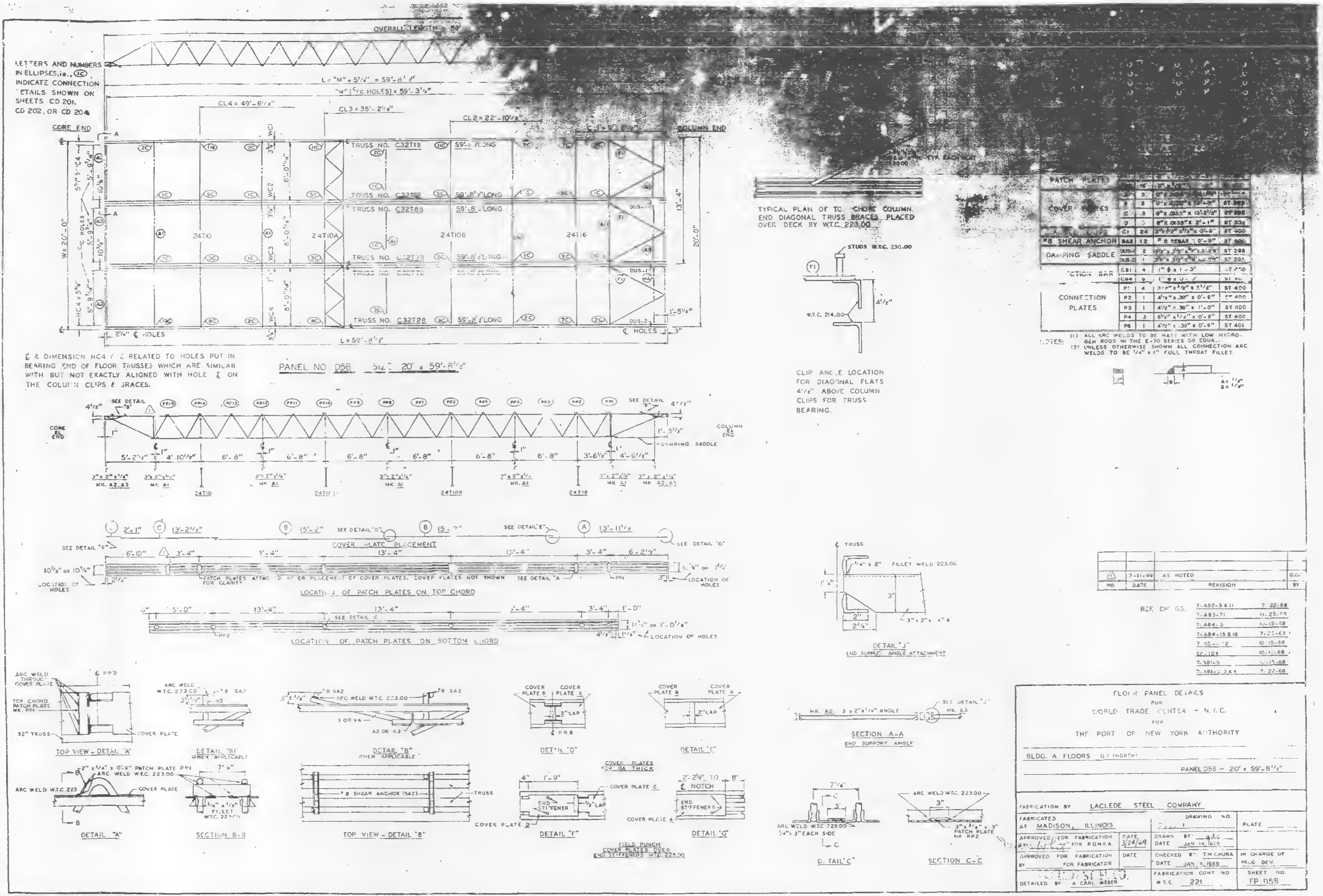
| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-72 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 45 & 46 (SOUTH)
PANEL DR5K 20' x 58'-6"

FABRICATED BY LACLEDE STEEL COMPANY

| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-A83-72 4-15-68 | PLATE |
| APPROVED FOR FABRICATION James White FOR P. of N.Y.A. DATE 2/4/69 | DRAWN BY gdc DATE JAN. 14, 1969 | |
| APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE | CHECKED BY: T.M.CHURA DATE JAN. 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY CARL WEBER | FABRICATION CONT. NO W.T.C. 221 | SHEET NO. FP DR5K |



LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

℄ & DIMENSION HC4 & E RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN. END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| | | | | |
|---|---|---|---|---|
| PATCH PLATES | [illegible] | [illegible] | [illegible] | [illegible] |
| COVER PLATES | [illegible] | 3 | [illegible] | [illegible] |
| | [illegible] | 8 | [illegible] | ST [illegible] |
| | C | 3 | 6" x .0135" x 13'-2½" | ST 298 |
| | D | 3 | 6" x .0135" x 2'-1" | ST 304 |
| [illegible] | C1 | 24 | [illegible] x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x [illegible] | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x [illegible] | ST 298 |
| [illegible]CTION BAR | CB1 | 4 | 1" ɸ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ɸ x [illegible] | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 3½" | ST 400 |
| | P2 | 1 | 4½" x .30" x 0'-5" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ⅛"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 3-11-69 | AS NOTED | G.D. |

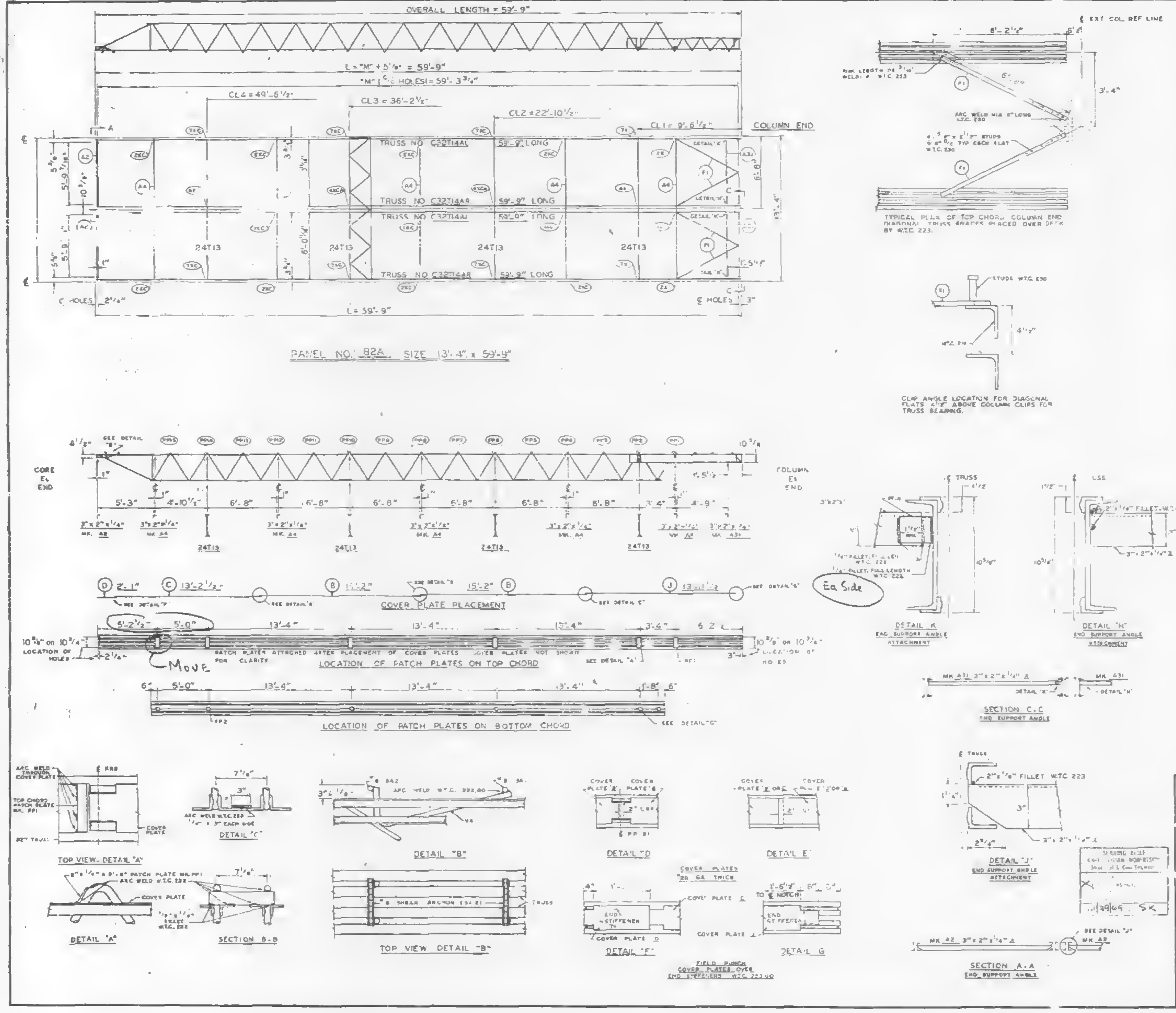
REF. DWGS.

| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-71 | 11-25-69 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-AC-[illegible]2 | 10-15-68 |
| SA-124 | 10-1[illegible]-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)
PANEL D58 - 20' x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DRAWING NO. [illegible] 1
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 3/24/69
DRAWN BY adc DATE JAN 14, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE JAN 14, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP D58


OVERALL LENGTH = 59'-9"
L = "M" + 5 1/8" = 59'-9"
"M" (C-C HOLES) = 59'-3 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO C32T14AL 59'-9" LONG
TRUSS NO C32T14AR 59'-9" LONG
TRUSS NO C32T14AL 59'-9" LONG
TRUSS NO C32T14AR 59'-9" LONG
24T13
13'-4"
6'-8"
L = 59'-9"
℄ HOLES 2 1/4"
℄ HOLES 3"
PANEL NO. 82A SIZE 13'-4" x 59'-9"
EXT COL REF LINE
6'-2 1/2"
3'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
CORE ℄ END
COLUMN ℄ END
5'-3"
4'-10 1/2"
6'-8"
3'-4"
4'-9"
3" x 2" x 1/4" MK. A2
3" x 2" x 1/4" MK. A4
3" x 2" x 1/4" MK. A31
COVER PLATE PLACEMENT
D 2'-1"
C 13'-2 1/2"
B 15'-2"
J 13'-11 1/2"
Ea Side
5'-2 1/2"
5'-0"
13'-4"
6'-2 1/2"
10 5/8" OR 10 3/4" LOCATION OF HOLES
Move
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
1'-8"
6"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
1/4" FILLET W.T.C. 223
SECTION C-C END SUPPORT ANGLE
MK. A31 3" x 2" x 1/4" ∠
TOP VIEW - DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA-2)
ARC WELD W.T.C. 222.00
DETAIL "D"
DETAIL E
DETAIL "F"
DETAIL G
COVER PLATES 28 GA THICK
END STIFFENER
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2" x 1/4" FILLET W.T.C. 223
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
MK. A2 3" x 2" x 1/4" ∠
1/29/69 SK

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T14AL | 2 | C32T14AL x 59'-9" | ST 214AL |
| | T14AR | 2 | C32T14AR x 59'-9" | ST 214AL |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T13 | 4 | 24T13 x 13'-3" | ST 213 |
| | | | | |
| | | | | |
| | | | | |
| 3" x 2" x 1/4" ANGLE | A2 | 2 | 3" x 2" x 1/4" x 5'-11 5/16" | ST 403 |
| | A4 | 5 | 3" x 2" x 1/4" x 13'-3" | ST 403 |
| | A31 | 2 | 3" x 2" x 1/4" x 5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PK11 | 2 | 3" x 1/2" x 0'-2 3/8" | ST 4 2 |
| DIAGONAL FLATS | F1 | 4 | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 12 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 12 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 4 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 2 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 2 | 9" x .0135" 2'-1" | ST 303 |
| | J | 2 | 6" x .035 13'-11 1/2" | ST 204 |
| ANGLE CLIPS | C1 | 16 | 2" x 1 1/2" x .25" x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SAC | 4 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 64 | 1" ø x 1'-3" | ST 400 |
| | CD | 1 | 1" ø x 1'-7 | |
| | | | | |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2" x .38" x 0'-9" | ST 400 |
| | P3 | 4 | 4 1/2" x .38" x 1'-0" | ST 400 |
| | P8 | 4 | 3" x 1/2" x 1'-2" | ST 409 |
| | | | | |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN ROD IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, I.E., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

| NO | DATE | REVISION | BY |
|---|---|---|---|
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| | | | |

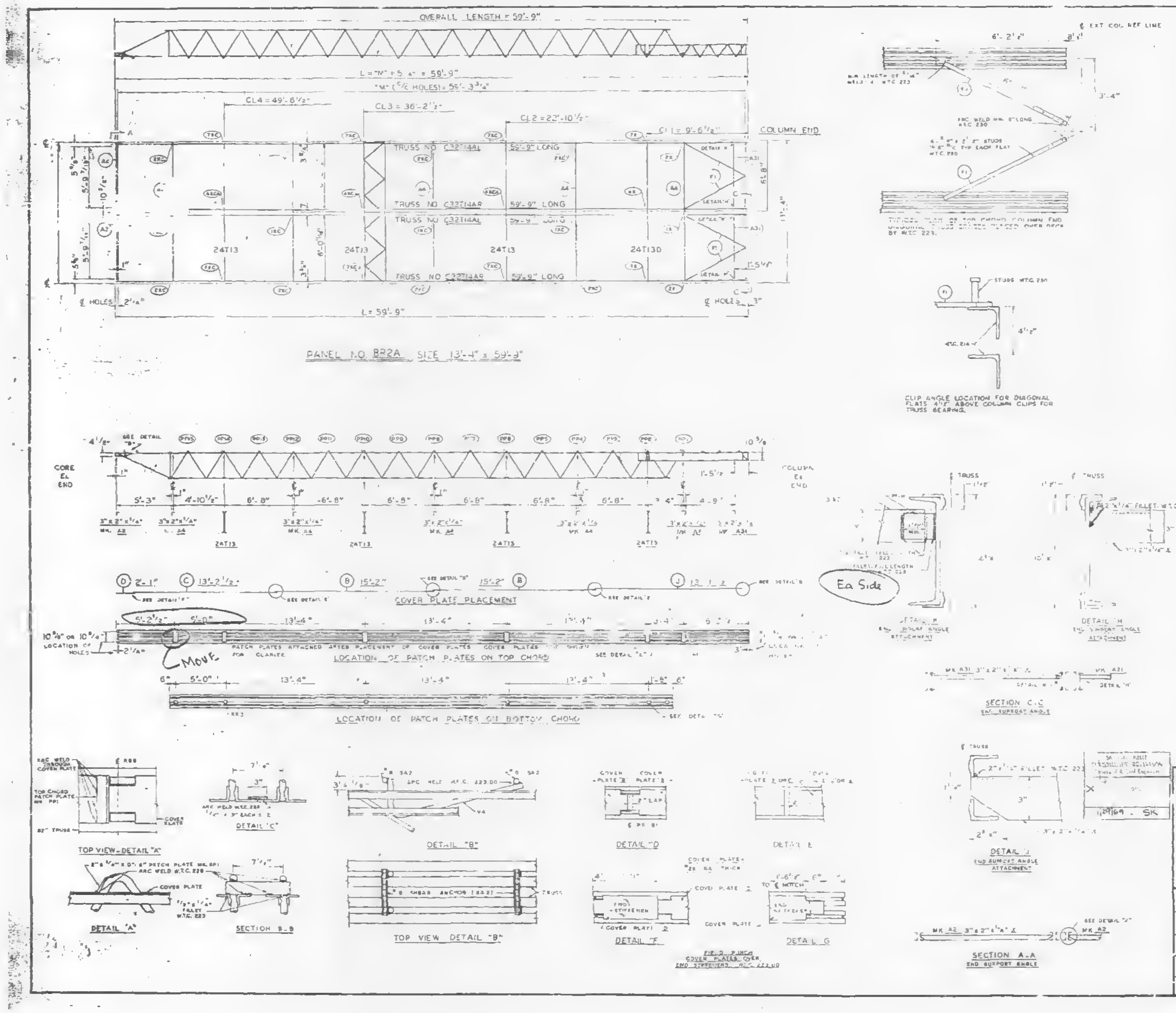
REF DRWG.

| | |
|---|---|
| 7-A83-28 | 10-4-68 |
| 7-A81-13 | 10-4-68 |
| 7-A82-8 | 7-22-68 |
| 7-450-28 | 7-22-68 |
| SA-124 | 10-11-68 |
| 7-A83-24 | 8-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL 82A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING 7-A83-26 PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A. DATE ______
DRAWN BY L.R. DATE DEC. 5, 1966
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR DATE ______
CHECKED BY T.M. CHURA DATE DEC. 5, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP 82A



| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T14AL | 2 | C32T14AL x 59'-9" | ST 214AL |
| | T14AR | 2 | C32T14AR x 59'-9" | ST 214AL |
| | | | | |
| | | | | |
| BRIDGING TRUSSES | T13 | 3 | 24T13 x 13'-3" | ST 213 |
| | T130 | 1 | 24T130 x 13'-3" | ST 2130 |
| | | | | |
| | | | | |
| 3"x2"x1/4" ANGLE | A2 | 2 | 3"x2"x1/4"x 5'-11 1/4" | ST 403 |
| | A4 | 5 | 3"x2"x1/4"x 13'-3" | ST 403 |
| | A31 | 2 | 3"x2"x1/4"x 5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 2 | 3"x1/4"x 0'-2 3/8" | ST 412 |
| DIAGONAL PLATE | [illegible] | [illegible] | [illegible] | ST 402 |
| PATCH PLATES | PP1 | 12 | 2"x1/4"x 0'-9" | ST 400 |
| | PP2 | 12 | 3"x3/8"x 0'-3" | ST 400 |
| COVER PLATES | B | 4 | 9"x.0135"x 15'-2" | ST 303 |
| | C | 2 | 9"x.0135"x 13'-2 1/2" | ST 303 |
| | D | 2 | 9"x.0135"x 2'-1" | ST 303 |
| | J | 2 | 9"x.012 x 13'-8 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 18 | 2"x1 1/2"x 2 [illegible] | ST 430 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 4 | #8 REBAR 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 34 | 1"φx 1'-3" | ST 400 |
| | CB | 1 | 1"φ x 1'-7 | |
| | | | | |
| CONNECTION PLATES | P1 | 4 | 3 1/2"x3/4"x 0'-6 1/2" | ST 400 |
| | P2 | 4 | 4 1/2"x.39"x 0'-6" | ST 400 |
| | P3 | 4 | 4 1/2"x.39"x 1'-0" | ST 400 |
| | P8 | 4 | 3"x1/8"x 1'-2" | ST 409 |
| | | | | |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
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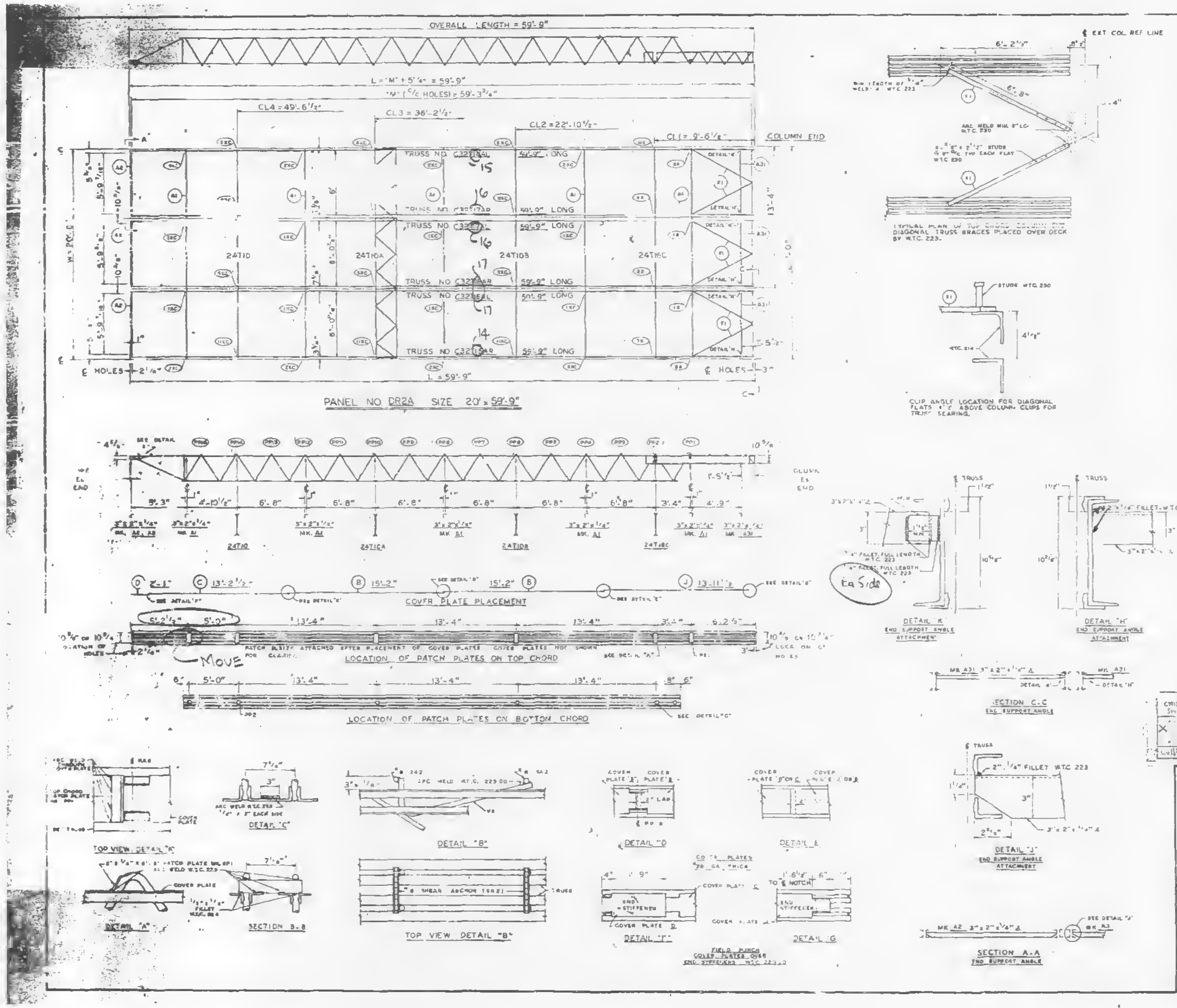
| REF. DRWG. | |
|---|---|
| 7-A83-27 | 10-4-68 |
| 7-A81-13 | 10-4-68 |
| 7-A82-8 | 7-22-68 |
| 7-A84-28 | 7-22-68 |
| SA-12A | 10-11-62 |
| 7-A83-24 | 8-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL B82A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-2
PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A. DATE ____
DRAWN BY LH
DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE ____
CHECKED BY TM CHURA
DATE DEC. 5, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP B82A


OVERALL LENGTH = 59'-9"
L = "M" + 5'1/4" = 59'-9"
CL4 = 49'-6 1/2"
CL3 = 38'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14AL
TRUSS NO. C32T15AR
TRUSS NO. C32T16AL
TRUSS NO. C32T14AR
59'-9" LONG
24T10
24T10A
24T10B
24T10C
15
16
17
14
HOLES
L = 59'-9"
PANEL NO. DR2A SIZE 20' x 59'-9"
COLUMN END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
MOVE
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD SHOWING DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS SEATING.
Ea Side
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION B-B
DETAIL "C"
DETAIL "B"
TOP VIEW DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T14AL | 1 | C32T14AL x 59'-9" | ST 214AL |
| | T15AR | 1 | C32T15AR x 59'-9" | ST 215AL |
| | [illegible] | 1 | [illegible] | ST 216AL |
| | [illegible] | 1 | [illegible] | |
| | [illegible] | 1 | [illegible] | ST 217AL |
| | [illegible] | 1 | [illegible] | |
| BRIDGING TRUSSES | T10 | 1 | 24T10 x 19'-11" | ST 210C |
| | T10A | 1 | 24T10A x 19'-11" | ST 210D |
| | T10B | 1 | 24T10B x 18'-11" | ST 210E |
| | T10C | | 24T10C x 19'-11" | ST 210B |
| 3"x2"x1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x1/4"x5'-11 5/8" | ST 403 |
| | A3 | 1 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x2"x1/4"x5'-6 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | [illegible] | 3 | [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 3/8" x 6'-6" | ST 402 |
| PATCH PLATES | PP1 | 2 | 2" x 1/4" x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x 3/8" 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| | J | 3 | 8" x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x .25" x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-8" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 1/8" x 0'-6 1/8" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-6" | ST 401 |
| | P9 | 8 | 3" x 1/2" x 1'-2" | ST 403 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1E)
ALL CONNECTION DETAILS FOR FLOORS 2_, 50 & 92 ARE SHOWN ON SHEETS CD 2-0 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/8" FULL THROAT FILLET.

A = 1/8"
B = 1/4"

| NO. | DATE | REVISION | BY |
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| | | | |

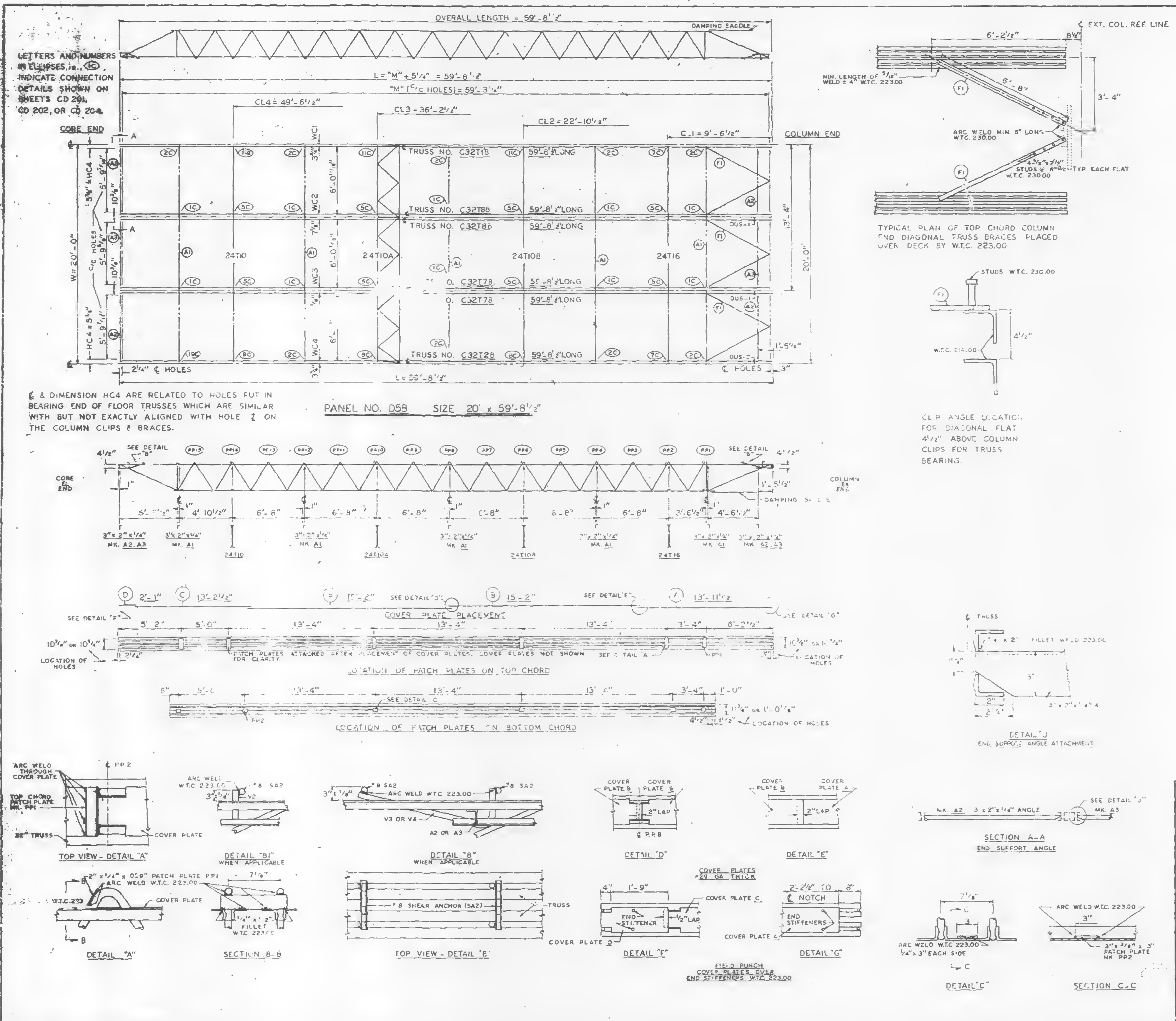
SKILLING, HELLE, CHRISTIANSEN, ROBERTSON
Structural & Civil Engineers

| REF. DRWG. | | |
|---|---|---|
| | 7-A83-31 | 10-4-68 |
| | 7-A84-29 | 7-22-68 |
| | 7-A81-13 | 10-4-68 |
| | 7-A91-14, 15 & 16 | 10-4-68 |
| | 7-A82-13 | 10-4-68 |
| | 7-A82-17 | 10-4-68 |
| | S4-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL DR2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-31 PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE
DRAWN BY [illegible] DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE DEC. 5, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. HERES
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP DR2A



LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

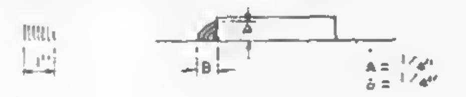
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLAT 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T18 | 1 | C32T18 - 59'-8½" | ST 201B |
| | T28 | 1 | C32T28 - 59'-8½" | ST 202B |
| | T78 | 2 | C32T78 - 59'-8½" | ST 207B |
| | T88 | 2 | C32T88 - 59'-8½" | ST 208B |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 15 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1 - 3" | ST 400 |
| | CB4 | 0 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



REF. DRWGS.

| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-71 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-66 |
| 7-SB1-5 | 10-15-68 |
| 7-SB1-2, 3 & 4 | 7-22-68 |

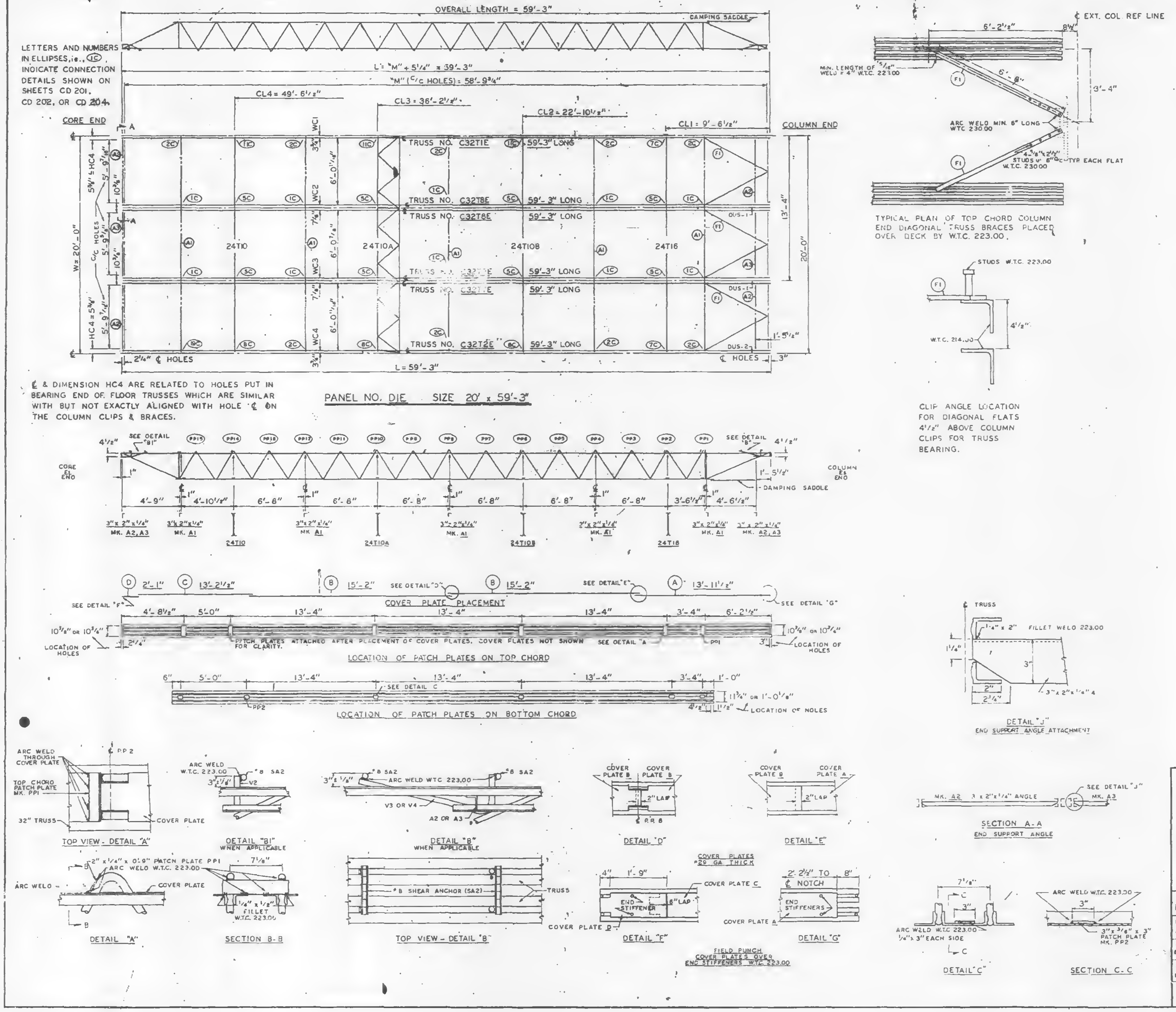
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)

PANEL D58 - 20' x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3.71 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A | DATE 2/4/69 | DRAWN BY ACW<br>DATE JAN 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M. CHURA<br>DA - JAN 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP D58 |


OVERALL LENGTH = 59'-3"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, ie., 1C INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.
L = "M" + 5¼" = 59'-3"
"M" (C/C HOLES) = 58'-9¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1E 59'-3" LONG
TRUSS NO. C32T8E 59'-3" LONG
TRUSS NO. C32T8E 59'-3" LONG
TRUSS NO. C32T7E 59'-3" LONG
TRUSS NO. C32T7E 59'-3" LONG
TRUSS NO. C32T2E 59'-3" LONG
24T10
24T10A
24T10B
24T16
W = 20'-0"
13'-4"
20'-0"
2¼" ℄ HOLES
L = 59'-3"
℄ HOLES
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIE SIZE 20' x 59'-3"
6'-2½"
8½"
℄ EXT. COL REF LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
6'-8"
3'-4"
ARC WELD MIN. 6" LONG WTC 230.00
4-5/8"x2½" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.
STUDS W.T.C. 223.00
W.T.C. 214.00
4½"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B1"
SEE DETAIL "B"
CORE ℄ END
COLUMN ℄ END
DAMPING SADDLE
4'-9"
4'-10½"
6'-8"
3'-6½"
4'-6½"
3"x2"x¼" MK. A2, A3
3"x2"x¼" MK. A1
24T10
24T10A
24T10B
24T16
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL C
LOCATION OF PATCH PLATES ON BOTTOM CHORD
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
#8 SA2
V3 OR V4
A2 OR A3
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "D"
DETAIL "E"
DETAIL "A"
2" x ¼" x 0'-9" PATCH PLATE PP1
SECTION B-B
¼" x ½" FILLET W.T.C. 223.00
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #29 GA THICK
END STIFFENER
COVER PLATE C
COVER PLATE D
DETAIL "F"
2'-2½" TO 8" ℄ NOTCH
END STIFFENERS
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
℄ TRUSS
1-¼" x 2" FILLET WELD 223.00
3" x 2" x ¼" ≮
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
MK. A2 3 x 2" x ¼" ANGLE
SEE DETAIL "J" MK. A3
SECTION A-A END SUPPORT ANGLE
ARC WELD W.T.C. 223.00 ¼"x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x 3/8" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1E | 1 | C32T1E - 59'-3" | ST 201E |
| | T2E | 1 | C32T2E - 59'-3" | ST 202E |
| | T7E | 2 | C32T7E - 59'-3" | ST 207E |
| | T8E | 2 | C32T8E - 59'-3" | ST 208E |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x 3/8" x 8'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x 3/8" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x 3/8" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x 3/8" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P8 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

REF. DRWGS.

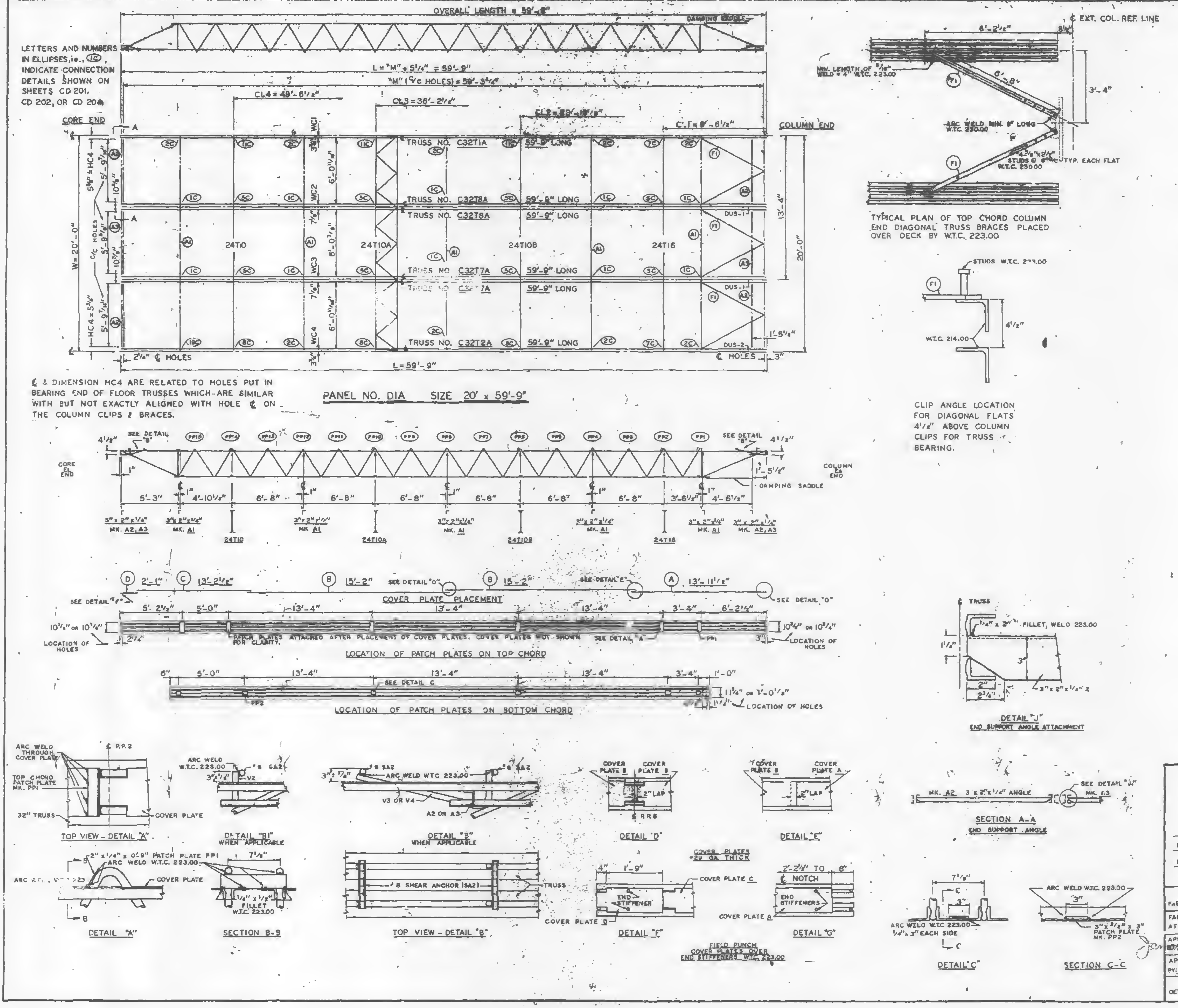
| | |
|---|---|
| 7-AB2-5 & 11 | 4-15-68 |
| 7-AB3-9 | 4-15-68 |
| 7-AB4-3, 3.1 & 39 | 1-3-68 |
| 7-AB4-15 & 16 | 5-8-68 |
| 7-AB4-42 | 4-1-68 |
| SA-124 | 10-20-68 |
| 7-AB1-2 | 2-15-68 |
| 7-AB1-3, 4 & 5 | 4-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
PANEL DIE - 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-9 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. | DATE 8/19/68 | DRAWN BY: adc DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA DATE JUL 22, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A CARL WEBER | | FABRICATION CONT. NO W.T.C. 221 | SHEET NO. FP DIE |


OVERALL LENGTH = 59'-9"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, ie., 1C, INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
L = "M" + 5¼" = 59'-9"
"M" (C/C HOLES) = 59'-3¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1A 59'-9" LONG
TRUSS NO. C32T8A 59'-9" LONG
TRUSS NO. C32T8A 59'-9" LONG
TRUSS NO. C32T7A 59'-9" LONG
TRUSS NO. C32T7A 59'-9" LONG
TRUSS NO. C32T2A 59'-9" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
W = 20'-0"
HC4 = 5⅜"
C/C HOLES
DUS-1
DUS-2
2¼" ℄ HOLES
L = 59'-9"
℄ HOLES
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIA SIZE 20' x 59'-9"
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN. 6" LONG W.T.C. 230.00
STUDS @ 6" TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 223.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
CORE ℄ END
COLUMN ℄ END
DAMPING SADDLE
5'-3"
4'-10½"
6'-8"
3'-6½"
4'-6½"
3" x 2" x ¼" MK. A2, A3
3" x 2" x ¼" MK. A1
24T10
24T10A
24T10B
24T16
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL C
LOCATION OF PATCH PLATES ON BOTTOM CHORD
1¼" x 2" FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
#8 SA2
V3 OR V4
A2 OR A3
DETAIL "B" WHEN APPLICABLE
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "D"
DETAIL "E"
MK. A2 3" x 2" x ¼" ANGLE
SEE DETAIL "J" MK. A3
SECTION A-A
END SUPPORT ANGLE
2" x ¼" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
DETAIL "A"
¼" x ½" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #29 GA. THICK
END STIFFENER
COVER PLATE C
COVER PLATE D
DETAIL "F"
2'-2¼" TO 8"
℄ NOTCH
END STIFFENERS
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
DETAIL "C"
3" x 2½" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1A | 1 | C32T1A - 59'-9" | ST 201A |
| | T2A | 1 | C32T2A - 59'-9" | ST 202A |
| | T7A | 2 | C32T7A - 59'-9" | ST 207A |
| | T8A | 2 | C32T8A - 59'-9" | ST 208A |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T18 | 1 | 24T18 - 19'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 3'-11⅛" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 3'-11⅛" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1½" x ⅜" x 6'-6" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 15'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 305 |
| | C | 3 | 9" x .0135" x 15'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 263 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P8 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

1"
B
A
A = ¼"
B = ¼"

REF. DRWGS.

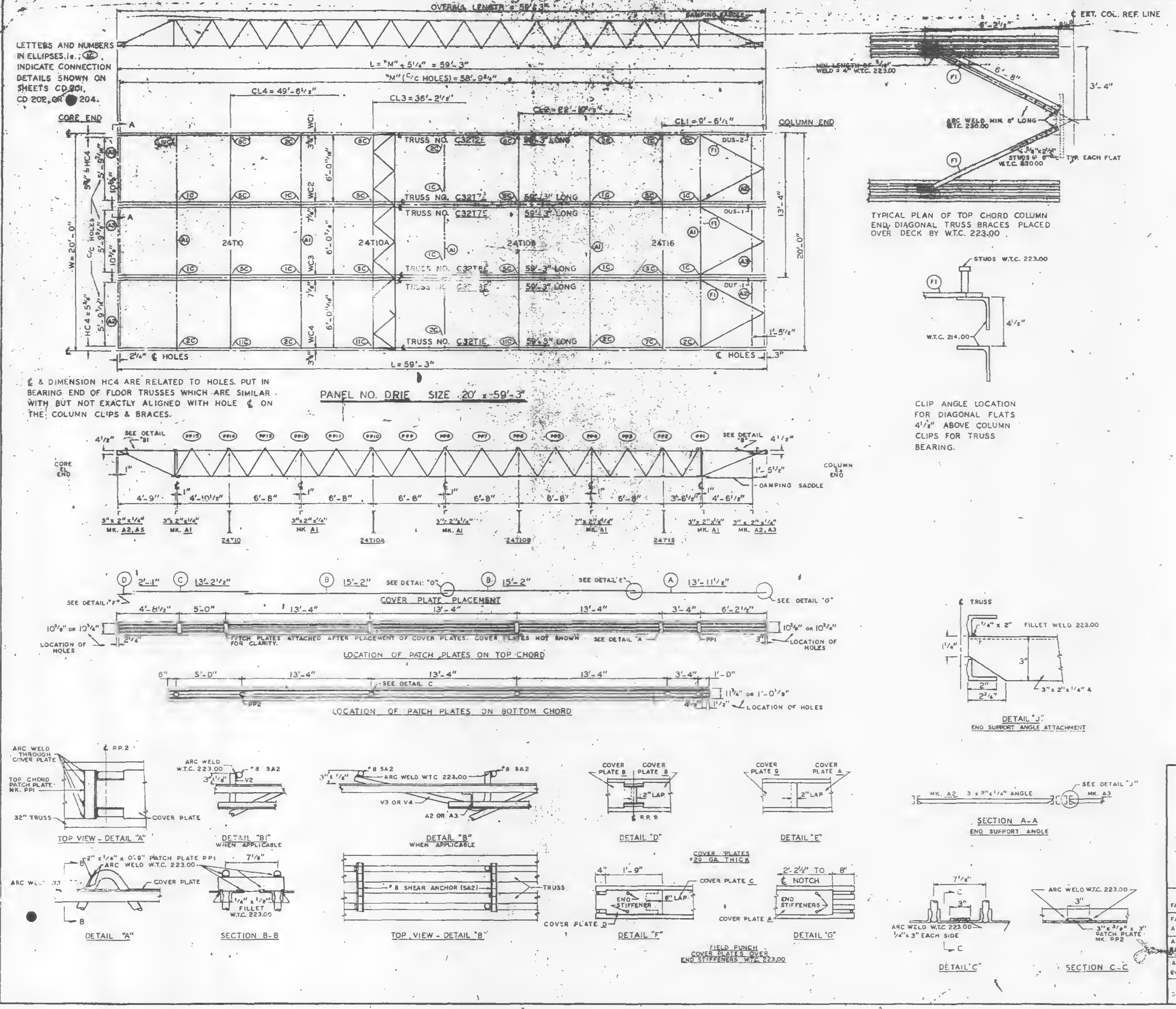
| | |
|---|---|
| 7-AB2-5 & 11 | 4-15-68 |
| 7-AB3-9 | 4-15-68 |
| 7-AB4-3, 3.1 & 39 | 1-3-68 |
| 7-AB4-15 & 16 | 5 6-68 |
| 7-AB4-42 | 4-1-68 |
| SP-124 | 10-20-68 |
| 7-AB1-2 | 2-15-68 |
| 7-AB1-3, 4 & 5 | 4-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68,
69 (NORTH) PANEL DIA - 20' x 59'-9"

FABRICATION BY: LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3.9 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. | DATE 8/16/68 | DRAWN BY: gdc<br>DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY: T.M.CHUPA<br>DATE JULY 22, 1968 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO.<br>DETAILED BY: A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DIA |



OVERALL LENGTH = 59'-3"
DAMPING SADDLE
℄ EXT. COL. REF. LINE
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR 204.
L = "M" + 5 1/4" = 59'-3"
"M" (C/C HOLES) = 58'-9 3/4"
CL4 = 49'-6 1/8"
CL3 = 36'-2 1/8"
CL2 = 22'-10 1/4"
CL1 = 9'-6 1/4"
CORE END
COLUMN END
TRUSS NO. C32T2E 59'-3" LONG
TRUSS NO. C32T7E 59'-3" LONG
TRUSS NO. C32T7E 59'-3" LONG
TRUSS NO. C32T8E 59'-3" LONG
TRUSS NO. C32T8E 59'-3" LONG
TRUSS NO. C32T1E 59'-3" LONG
24T10
24T10A
24T10B
24T16
W = 20'-0"
13'-4"
20'-0"
2 1/4" ℄ HOLES
℄ HOLES
L = 59'-3"
℄ & DIMENSION HC4 ARE RELATED TO HOLES. PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DRIE SIZE 20' x 59'-3"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
DETAIL "C"
SECTION C-C
COVER PLATES #29 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1E | 1 | C32T1E - 59'-3" | ST 201E |
| | T2E | 1 | C32T2E - 59'-3" | ST 202E |
| | T7E | 2 | C32T7E - 59'-3" | ST 207E |
| | T6E | 2 | C32T8E - 59'-3" | ST 206E |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x 2"x 1/4"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x 1/4"x 5'-1 3/4" | ST 403 |
| | A3 | 2 | 3"x 2"x 1/4"x 5'-1 1/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x 3/8"x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 16 | 2"x 1/4"x 0'-8" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9"x .0155"x 13'-11 1/2" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135"x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135"x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2"x 1 1/2"x 1/4"x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ⌀ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ⌀ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2"x 3/8"x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x .39"x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2"x 1/2"x 0'-8" | ST 400 |
| | P5 | 1 | 4 1/2"x .39"x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

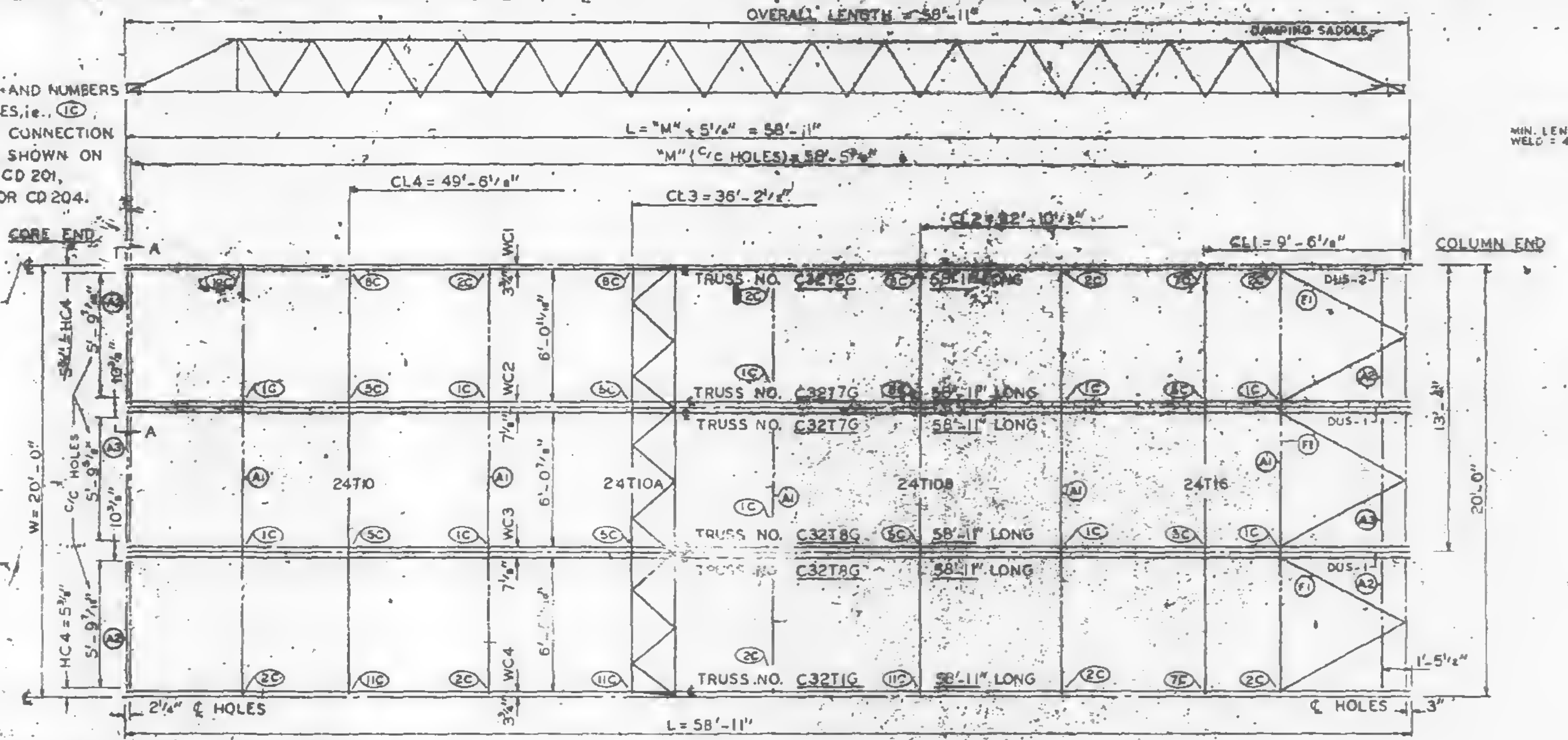
| REF. DRWGS. | |
|---|---|
| 7-A82-5 & 11 | 4-15-68 |
| 7-A83-9 | 4-15-68 |
| 7-A64-3, 3.1 & 39 | 1-3-68 |
| 7-A84-15 & 18 | 5-6-66 |
| 7-A84-42 | 4-1-68 |
| SA-124 | 10-20-68 |
| 7-A81-2 | 2-15-68 |
| 7-A81-3, 4 & 5 | 4-15-86 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (SOUTH)
PANEL DRIE- 20' x 59'-3"

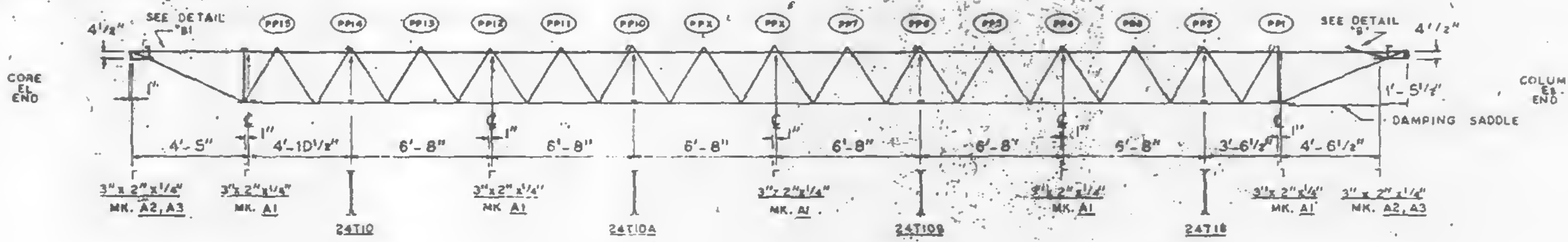
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-
PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A
DATE 8/19/68
DRAWN BY: gdc
DATE JULY 22, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR
DATE
LACLEDE STEEL CO.
CHECKED BY: T.M.CHURA
DATE JULY 22, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO. FP DRIE

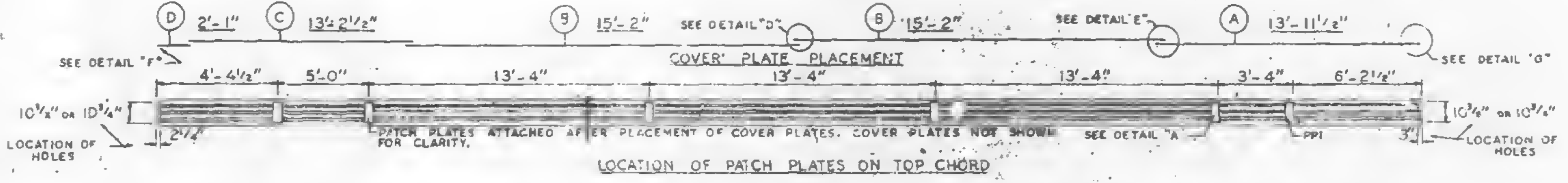
LETTERS AND NUMBERS IN ELLIPSES, i.e., ⓘC, INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.



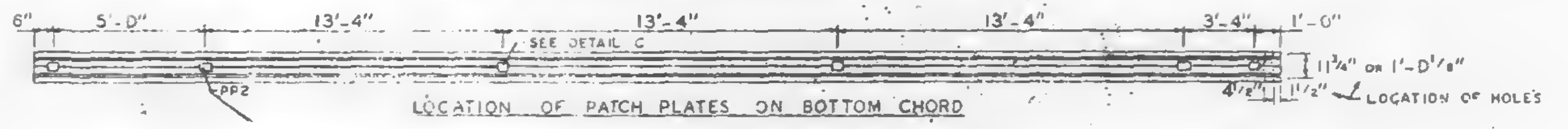
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIG SIZE 20' x 58'-11"

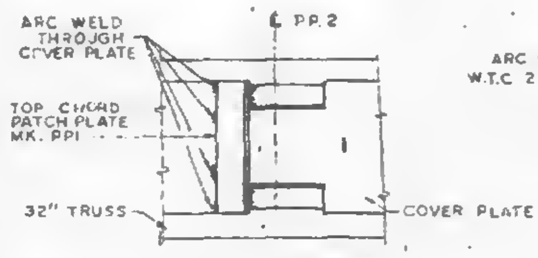




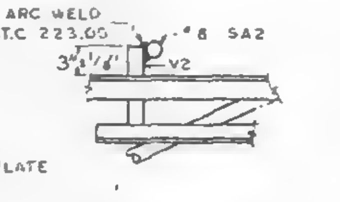
LOCATION OF PATCH PLATES ON TOP CHORD



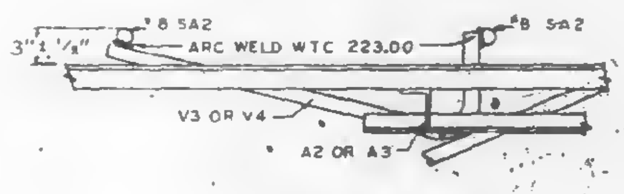
LOCATION OF PATCH PLATES ON BOTTOM CHORD



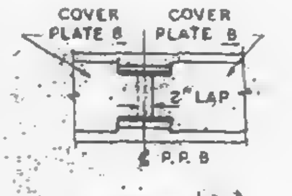
TOP VIEW - DETAIL "A"



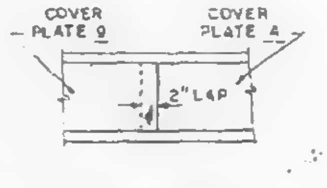
DETAIL "B1"
WHEN APPLICABLE



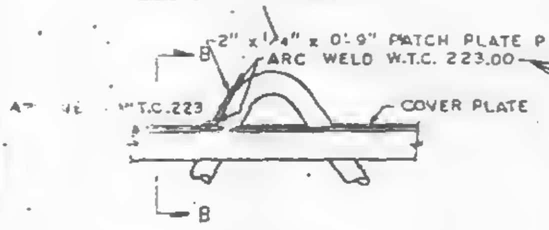
DETAIL "B"
WHEN APPLICABLE



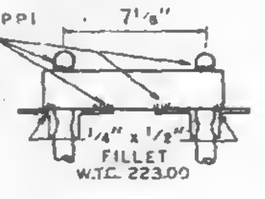
DETAIL "D"



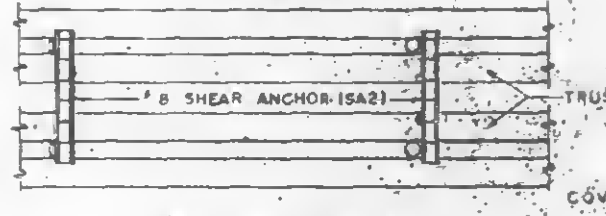
DETAIL "E"



DETAIL - "A"

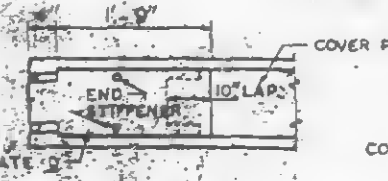


SECTION B-B



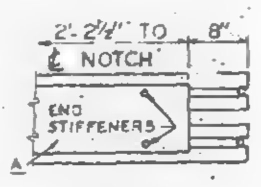
TOP VIEW - DETAIL "B"

COVER PLATES #29 GA. THICK

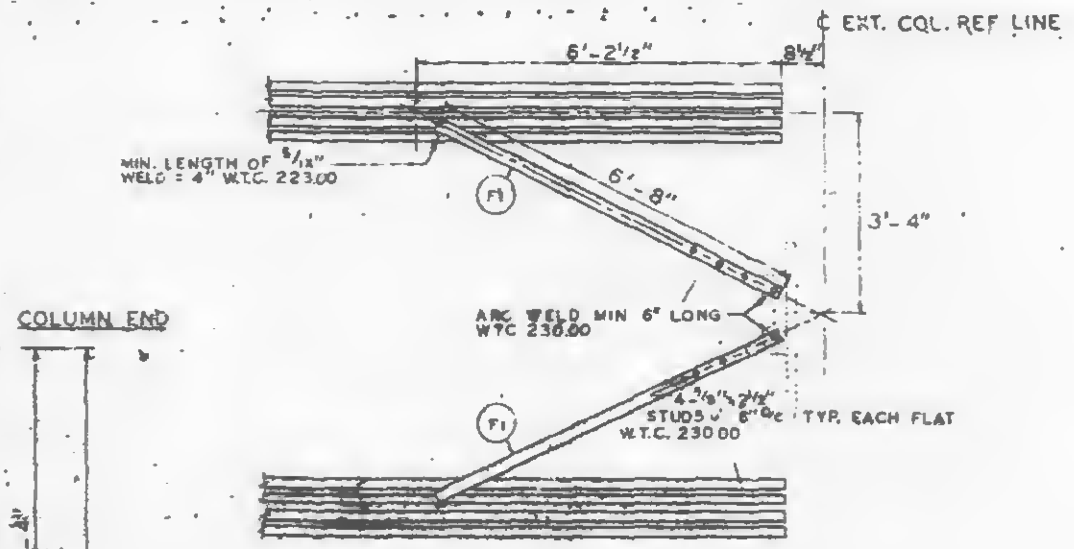


DETAIL "F"

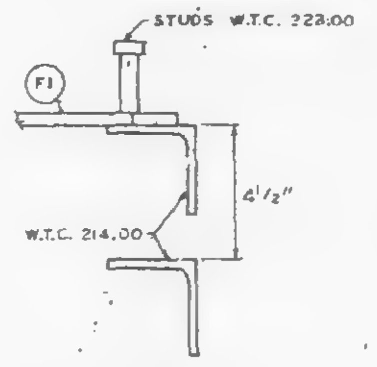
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



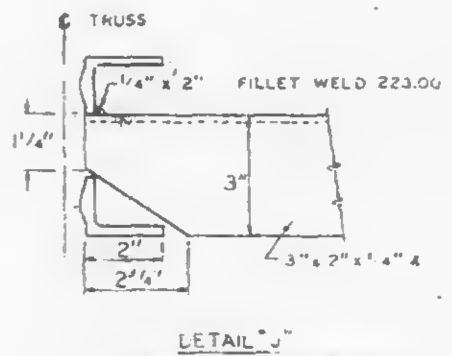
DETAIL "G"


℄ EXT. COL. REF LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN 6" LONG W.T.C 230.00
4-5/8" x 2 1/2" STUDS @ 6" C/C TYP. EACH FLAT W.T.C. 230.00
F1

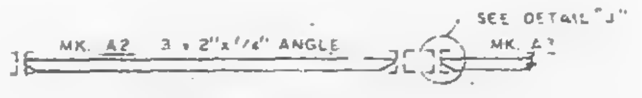
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



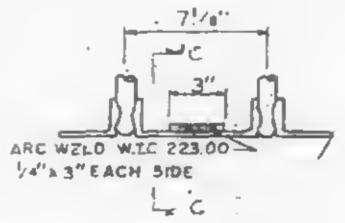
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



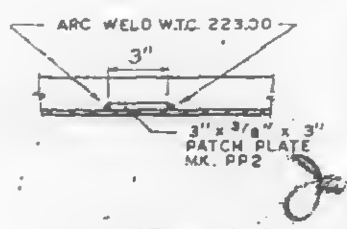
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



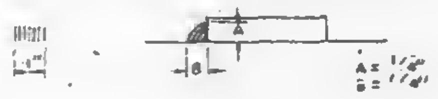
DETAIL "C"



SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T1G | 1 | C32T1G - 58'-11" | ST 2010 |
| | T2G | 1 | C32T2G - 58'-11" | ST 2020 |
| | T7G | 2 | C32T7G - 58'-11" | ST 2070 |
| | T8G | 2 | C32T8G - 58'-11" | ST 208G |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 1/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/4" x 3'-6 3/4" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/4" x 3'-6 3/4" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1 - 3" | ST 400 |
| | CB4 | 8 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/4" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P8 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



REF. DRWGS.

| | |
|---|---|
| 7-A82-5 & 11 | 4-15-68 |
| 7-A83-10 | 4-15-68 |
| 7-A84-3, 3.1 & 39 | 1-3-68 |
| 7-A84-15 & 16 | 5-6-68 |
| 7-A84-42 | 4-1-68 |
| SA-124 | 10-20-68 |
| 7-A81-2 | 2-15-68 |
| 7-A81-3, 4 & 5 | 4-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

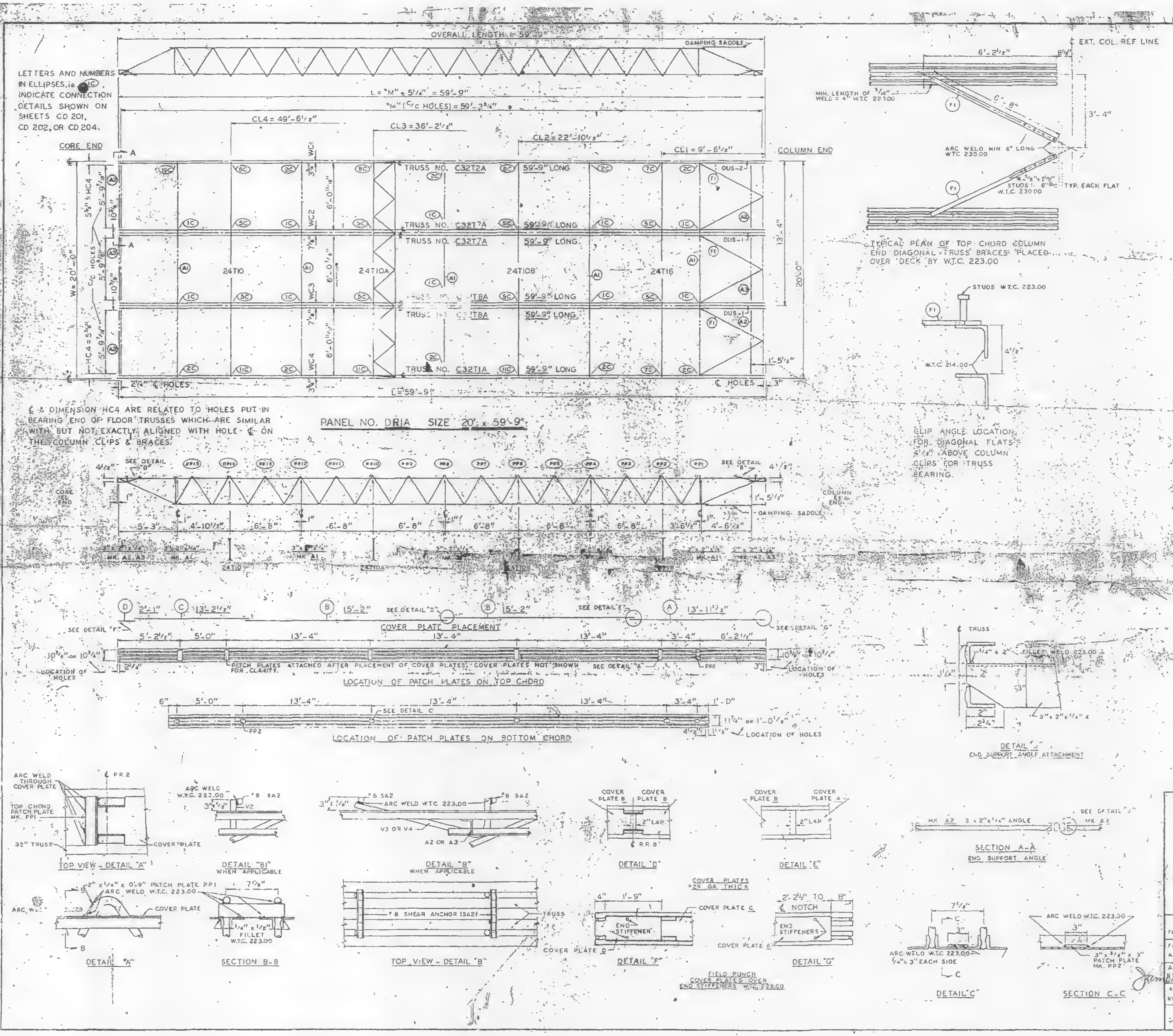
BLDG. A FLOORS 10-11, 39 (NORTH)

PANEL DRIG 20' x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY

| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7 A83-10 4-15-68 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 8/9/68 | DRAWN BY gdc DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR DATE<br>STEEL CO. | CHECKED BY T.M. CHURA DATE JULY 22, 1968 | IN CHARGE OF PROD. DEV |
| DETAILED BY A. CARL WEBER | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DRIG |

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.


OVERALL LENGTH = 59'-9"
DAMPING SADDLE
L = "M" + 5¼" = 59'-9"
"M" (C/C HOLES) = 59'-3¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T2A 59'-9" LONG
TRUSS NO. C32T7A 59'-9" LONG
TRUSS NO. C32T8A 59'-9" LONG
TRUSS NO. C32T1A 59'-9" LONG
24T10
24T10A
24T10B
24T16
W = 20'-0"
HC4 = 5⅜"
C/C HOLES
2¼" ℄ HOLES
℄ HOLES
L = 59'-9"
PANEL NO. DRIA SIZE 20' x 59'-9"
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
5'-3" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-6¼"
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
6'-2½"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS W.T.C. 230.00
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 223.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
SECTION A-A
END SUPPORT ANGLE
MK. A2 3 x 2" x ¼" ANGLE
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "F"
DETAIL "G"
END STIFFENER
END STIFFENERS
COVER PLATES #26 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "C"
SECTION C-C
ARC WELD W.T.C. 223.00

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T1A | 1 | C32T1A - 59'-9" | ST 201A |
| | T2A | 1 | C32T2A - 59'-9" | ST 202A |
| | T7A | 2 | C32T7A - 59'-9" | ST 207A |
| | T8A | 2 | C32T8A - 59'-9" | ST 208A |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅞" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 15 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ¾" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

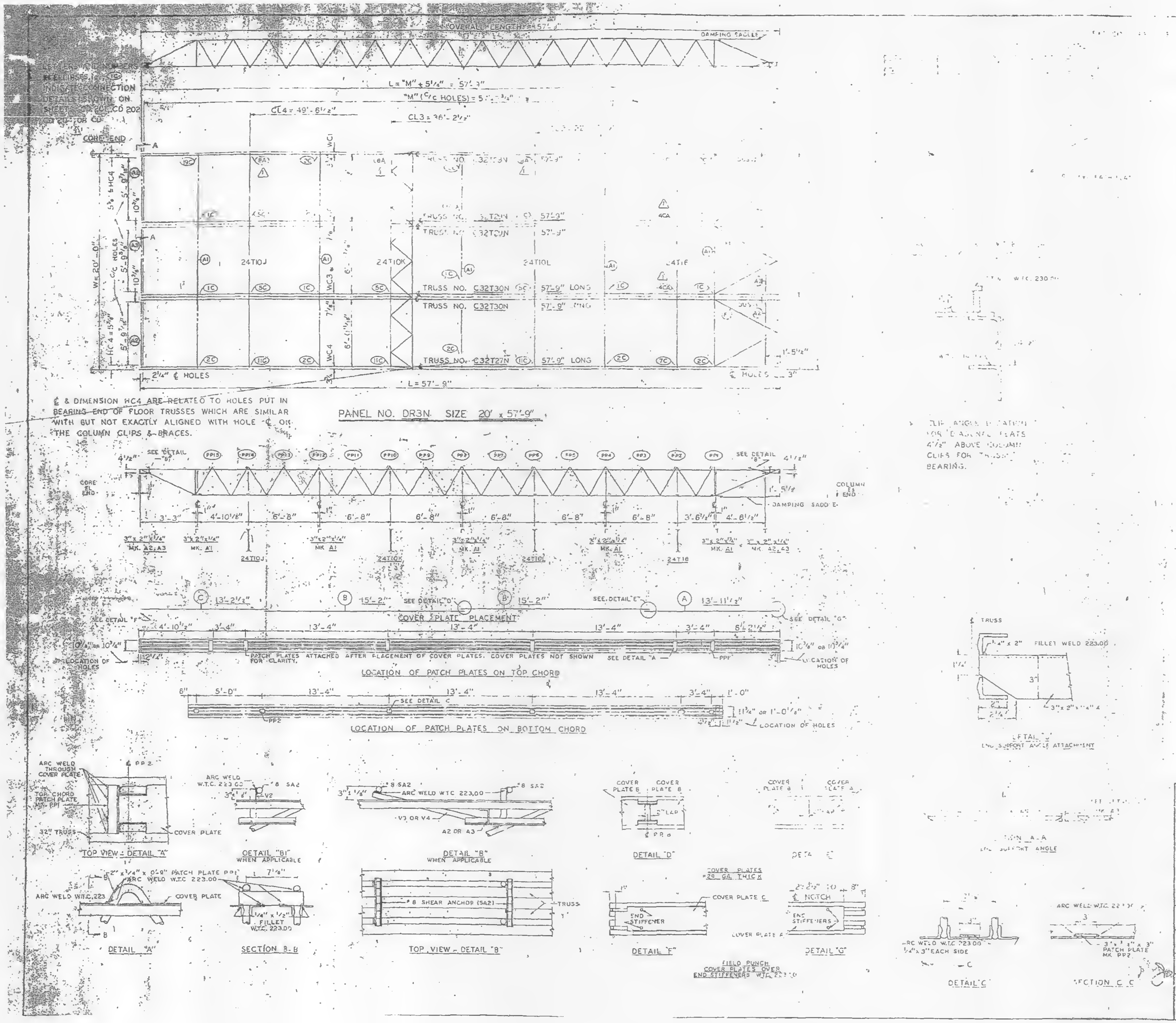
| REF. DRWGS. | |
|---|---|
| 7-AB2-5 & 11 | 4-15-68 |
| 7-AB3-10 | 4-15-68 |
| 7-AB4-3, 3.1 & 39 | 1-3-68 |
| 7-AB4-15 & 16 | 5-6-68 |
| 7-AB4-42 | 4-1-68 |
| SA-124 | 10-20-68 |
| 7-AB1-2 | 2-15-68 |
| 7-AB1-3, 4 & 5 | 4-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66 &
68-69 (NORTH) PANEL DRIA - 20' x 59'-9"

FABRICATION BY: LACLEDE STEEL COMPANY

| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-AB3-10 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY: James [illegible] FOR P.O.N.Y.A DATE 8/19/68 | DRAWN BY: gdc DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR DATE | CHECKED BY T.M. CHURA DATE JULY 22, 1968 | IN CHARGE OF PROD. DCV |
| DETAILED BY A. CARL WEBER | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DRIA |



| | | | | |
|---|---|---|---|---|
| [illegible] | [illegible] | 24 | 2" x [illegible] x 1'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x [illegible]-9" | ST 400 |
| ANG[illegible] | [illegible]S4 | 2 | 3½ x [illegible] x 3'-6⅞" | ST 298 |
| | [illegible]S2 | 1 | 3½" x [illegible] x 3'-6⅞" | ST 298 |
| [illegible] BAR | [illegible] | 10 | 1" ⌀ x [illegible]-3" ⚠1 | ST 400 |
| CONNECTION PLATES | [illegible] | 4 | 3½" x [illegible] x 6½" | ST 400 |
| | [illegible] | [illegible] | 4½" x .32" x [illegible]-0" | ST 400 |
| | P3 | 1 | 4½" x 39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES: [illegible] TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 4-22-69 | AS NOTED | G.D.C. |

REF. DRWGS.

| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-48 | 1-6-69 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SS-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1 2, 3 & 4 | 7-22-68 |

DETAILS

AUTHORITY

BLDG. A FLOORS 44 (NORTH) ⚠1

PANEL DR3N 20' x 57'-9"

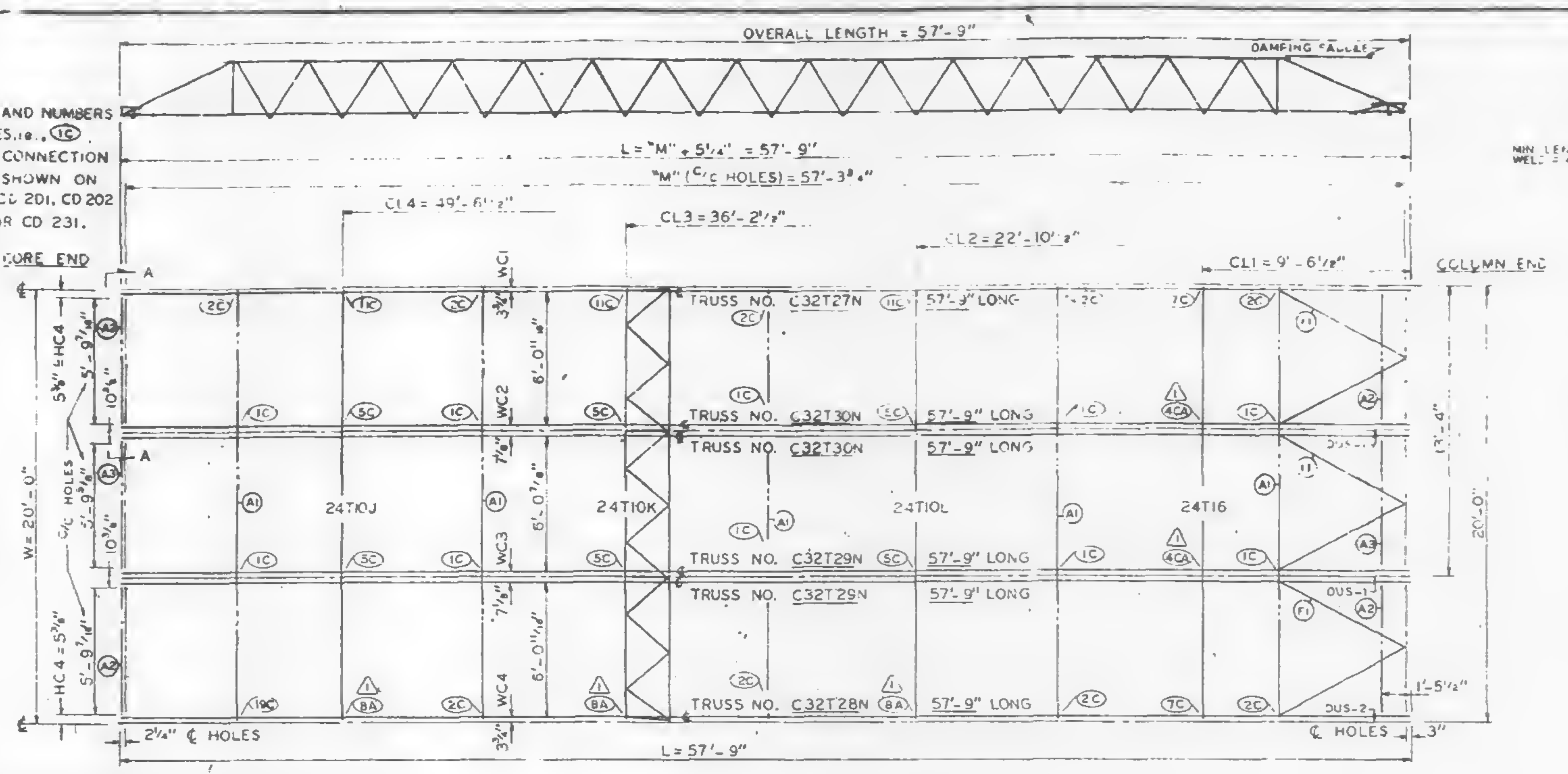
BLDG. B FLOORS - 44 (EAST & WEST)

COMPANY

FABRICATE AT
[illegible] DRAWING NO
AB3-48 1-6-69
PLATE
APPROVED FOR FABRICATION BY 6/12/69
DRAWN BY
DATE MARCH 26, 1969
CHECKED BY T.M.CHURA
DATE MARCH 26, 1969
IN CHARGE OF PROD. DEV.
FOR FABRICATOR
FABRICATION CONT. NO. 221
SHEET NO. FP-DR3N

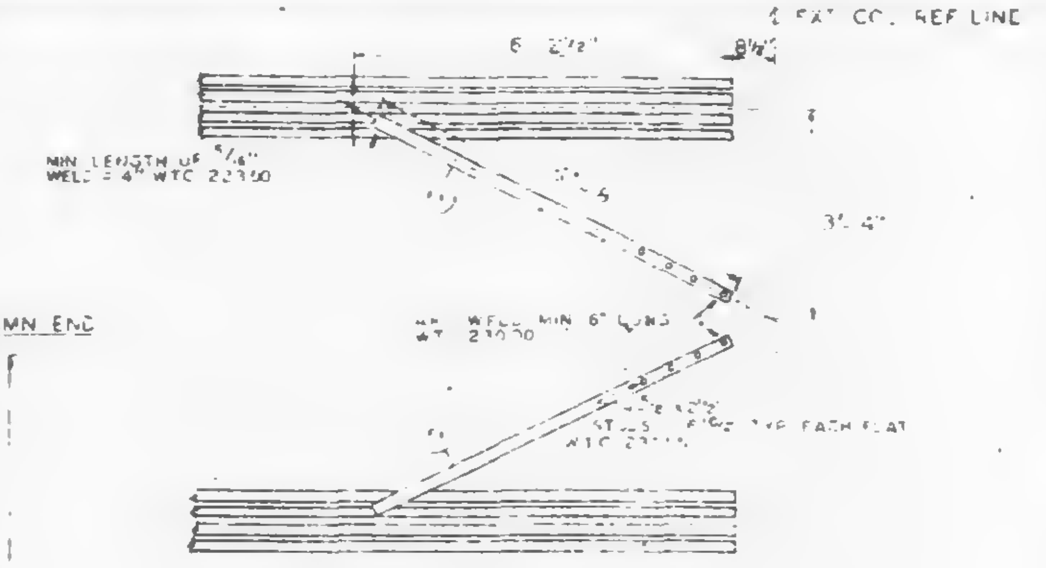
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204, OR CD 231.

△1 CORE END



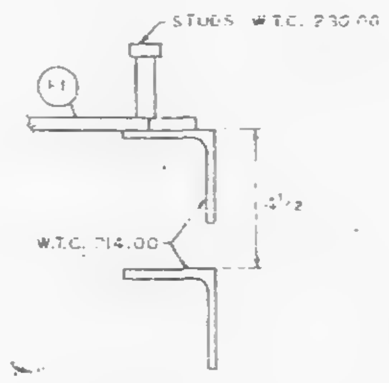
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D3N SIZE 20' x 57'-9"



℄ EXT. COL. REF LINE
6'-2½"
8¼"
MIN LENGTH OF ¼" WELD 2½" W.T.C. 223.00
3'-4"
STUDS TYP. EACH FLAT W.T.C.

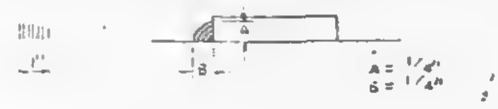
TYPICAL PLAN OF T.P. CHORD [illegible] END DIAGONAL TRUSS PLATES [illegible] OVER DECK BY W.T.C. 223.00

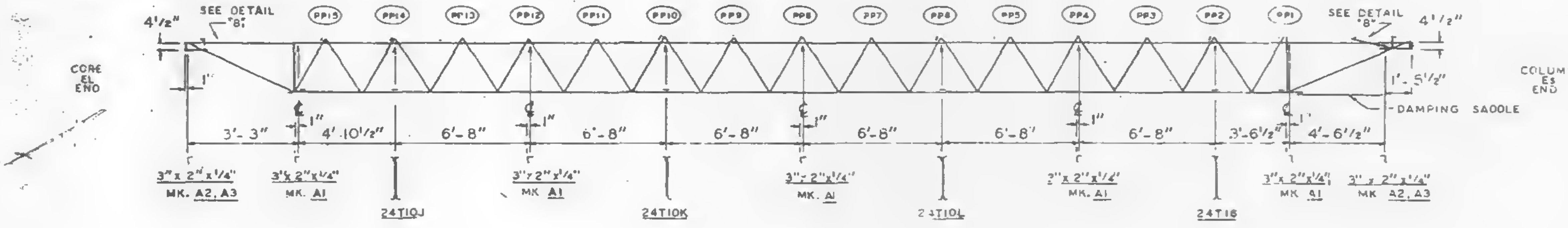


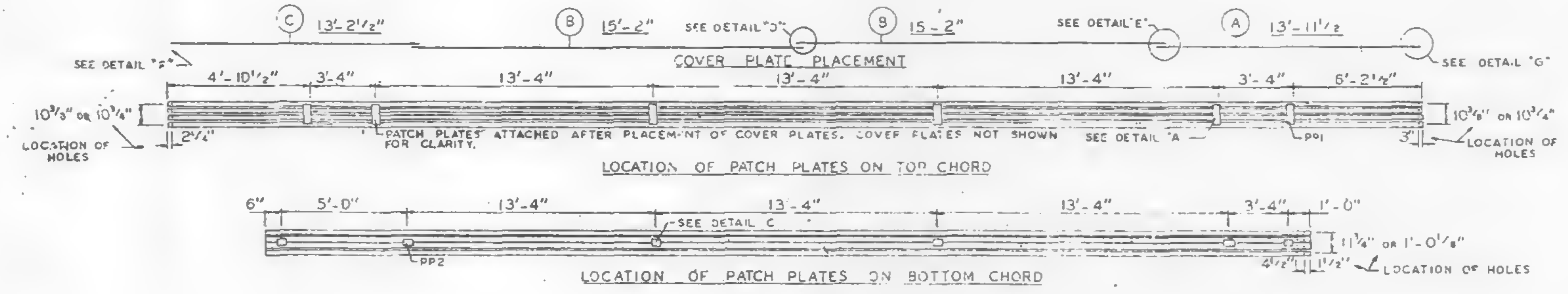
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

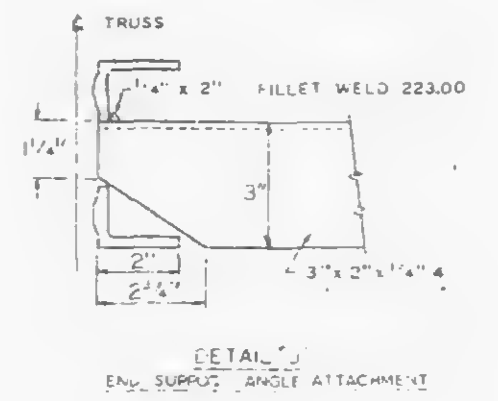
| REQUIRED MATERIAL PER PANEL | | | | REF DRWGS. |
|---|---|---|---|---|
| MATERIAL | MK. | [illegible] | SIZE | |
| FLOOR TRUSSES | T27N | 1 | C32T27N - 57'-9" | ST 227N |
| | T28N | 1 | C32T28N - 57'-9" | ST 228N |
| | T29N | 2 | C32T29N - 57'-9" | ST 229N |
| | T30N | 2 | C32T30N - 57'-9" | ST 230N |
| BRIDGING TRUSSES | T10J | 1 | 24T10J - 19'-11" | BT 210J |
| | T10K | 1 | 24T10K - 19'-11" | BT 210K |
| | T10L | 1 | 24T10L - 19'-11" | BT 210L |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3" x 2" x ¼" ANGLE | A1 | [illegible] | 3" x 2" x ¼" x 15'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x [illegible] x ¼" x 5'-11[illegible]" | ST 403 |
| [illegible] | [illegible] | [illegible] | [illegible] x ⅜" x 0'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 15 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 1 | 9" x .0135" x 13'-11[illegible]" | ST 303 |
| | B | 2 | 9" x 0.135" x 15'-2" | ST 303 |
| | C | 1 | 9" x .0135" x 13'-2½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #9 SHEAR ANCHOR | SA2 | 9 | #6 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ¾" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ¾" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | [illegible] | 10 | 1" ϕ x 1 - 3" △1 | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 5 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL SAC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



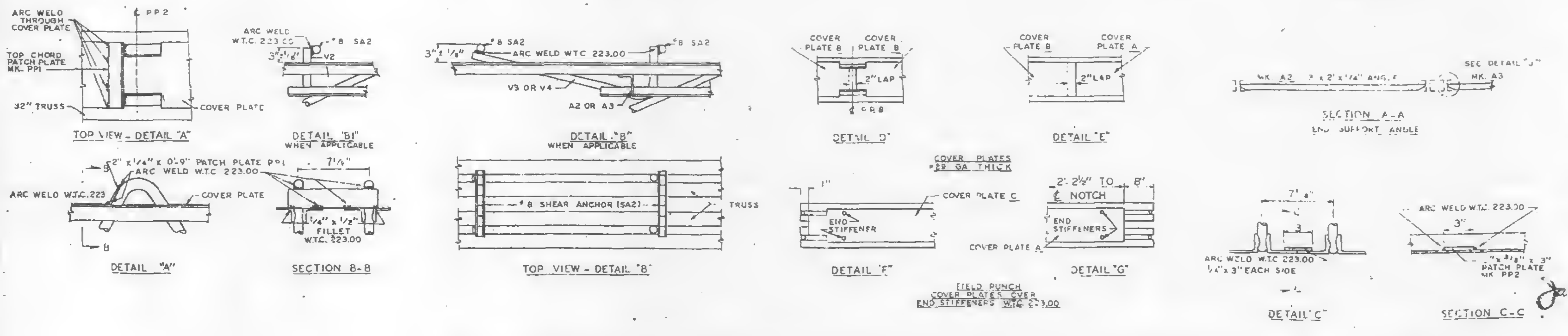






| | | | |
|---|---|---|---|
| | | | |
| | | | |
| △1 | 4-22-69 | AS NOTED | G.O.C. |
| NO. | DATE | REVISION | BY |

| F.E. DRWGS. | | |
|---|---|---|
| | 7-AB2-5 & 11 | 7-24-68 |
| | 7-AB3-47 | 1-6-69 |
| | 7-AB4-3 | 10-15-68 |
| | 7-AB4-15 & 16 | 7-24-68 |
| | 7-AB4-42 | 10-15-68 |
| | SA-124 | 10-11-68 |
| | 7-AB1-5 | 10-15-68 |
| | 7-AB1-2 & 3 | 7-24-68 |

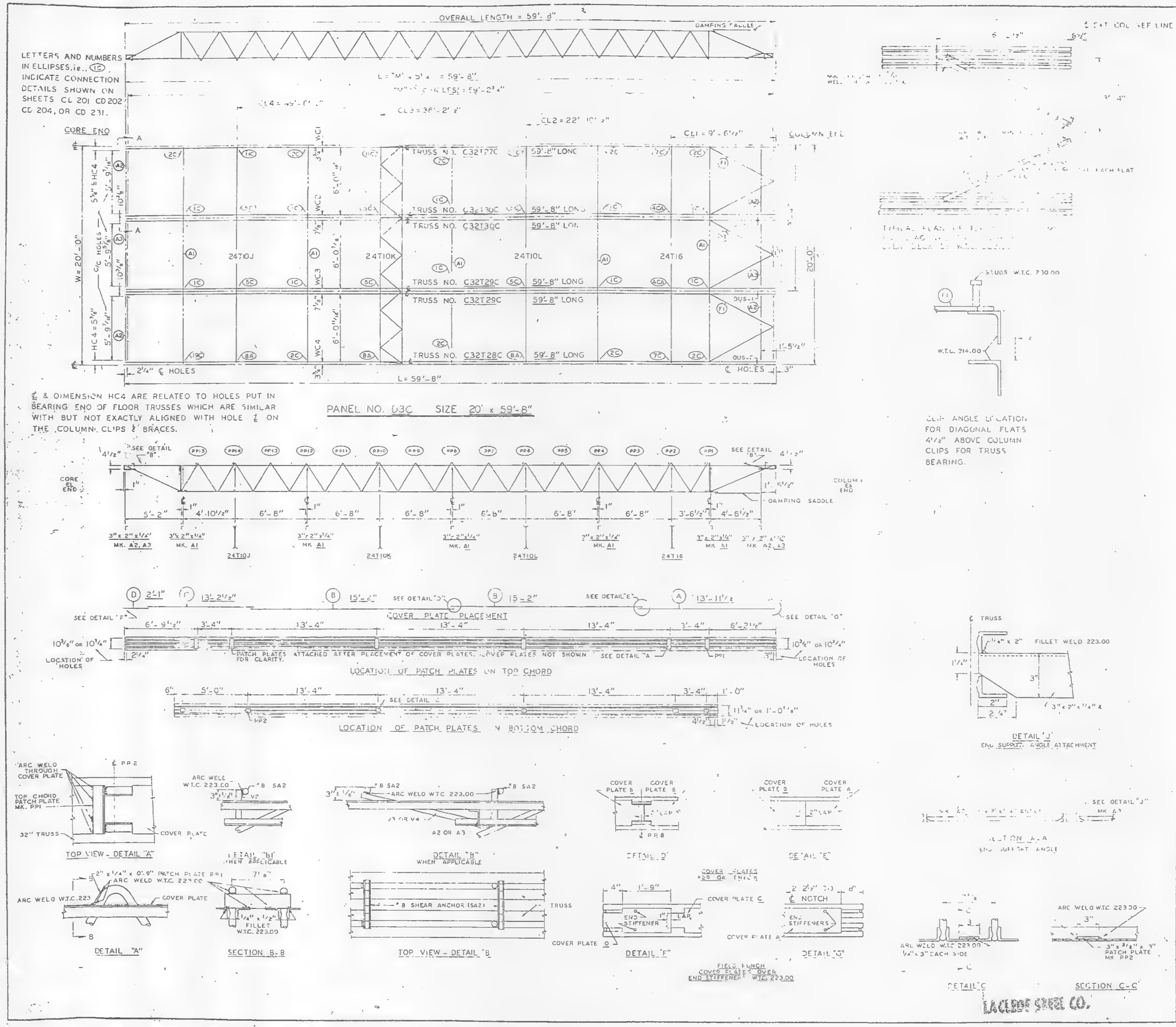


FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (NORTH)
PANEL D3N - 20' x 57'-9"
BLDG. B FLOORS 44 (EAST & WEST)

| | | | | |
|---|---|---|---|---|
| FABRICATION BY | LACLEDE STEEL COMPANY | | | |
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-47 | | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A | DATE 6/12/69 | DRAWN BY gdc | DATE MARCH 24 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA | DATE MARCH 24, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY CARL WEBER | | FABRICATION CONT NO. W.T.C. 221 | | SHEET NO. FP D3N |


OVERALL LENGTH = 59'-8"
DAMPING SADDLE
CORE END
COLUMN END
CL1 = 9'-6½"
CL2 = 22'-10½"
CL3 = 36'-2½"
L = 59'-8"
W = 20'-0"
HC4 = 5⅜"
TRUSS NO. C32T27C 59'-8" LONG
TRUSS NO. C32T30C 59'-8" LONG
TRUSS NO. C32T29C 59'-8" LONG
TRUSS NO. C32T28C 59'-8" LONG
24T10J
24T10K
24T10L
24T16
WC1
WC2
WC3
WC4
C HOLES
PANEL NO. D3C SIZE 20' x 59'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES IN BOTTOM CHORD
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
STUDS W.T.C. 230.00
W.T.C. 214.00
FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "C"
SECTION C-C
ARC WELD W.T.C. 223.00

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 CD 204, OR CD 231.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | 27C | 1 | C32T27C - 59'-8" | ST 227C |
| | 28C | 1 | C32T28C - 59'-8" | ST 228C |
| | 29C | 2 | C32T29C - 59'-8" | ST 229C |
| | 30C | 2 | C32T30C - 59'-8" | ST 230C |
| [illegible] | 10J | 1 | 24T10J - 19'-11" | ST 210J |
| | 10K | 1 | 24T10K - 19'-11" | ST 210K |
| | 10L | 1 | 24T10L - 19'-11" | ST 210L |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| [illegible] | A1 | 5 | 3" x 2" x ¼" x 15'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅜" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅜" | ST 403 |
| [illegible] | F | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| [illegible] | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 5 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 10 | 1" ɸ x - 3" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .38" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x [illegible] | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .38" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

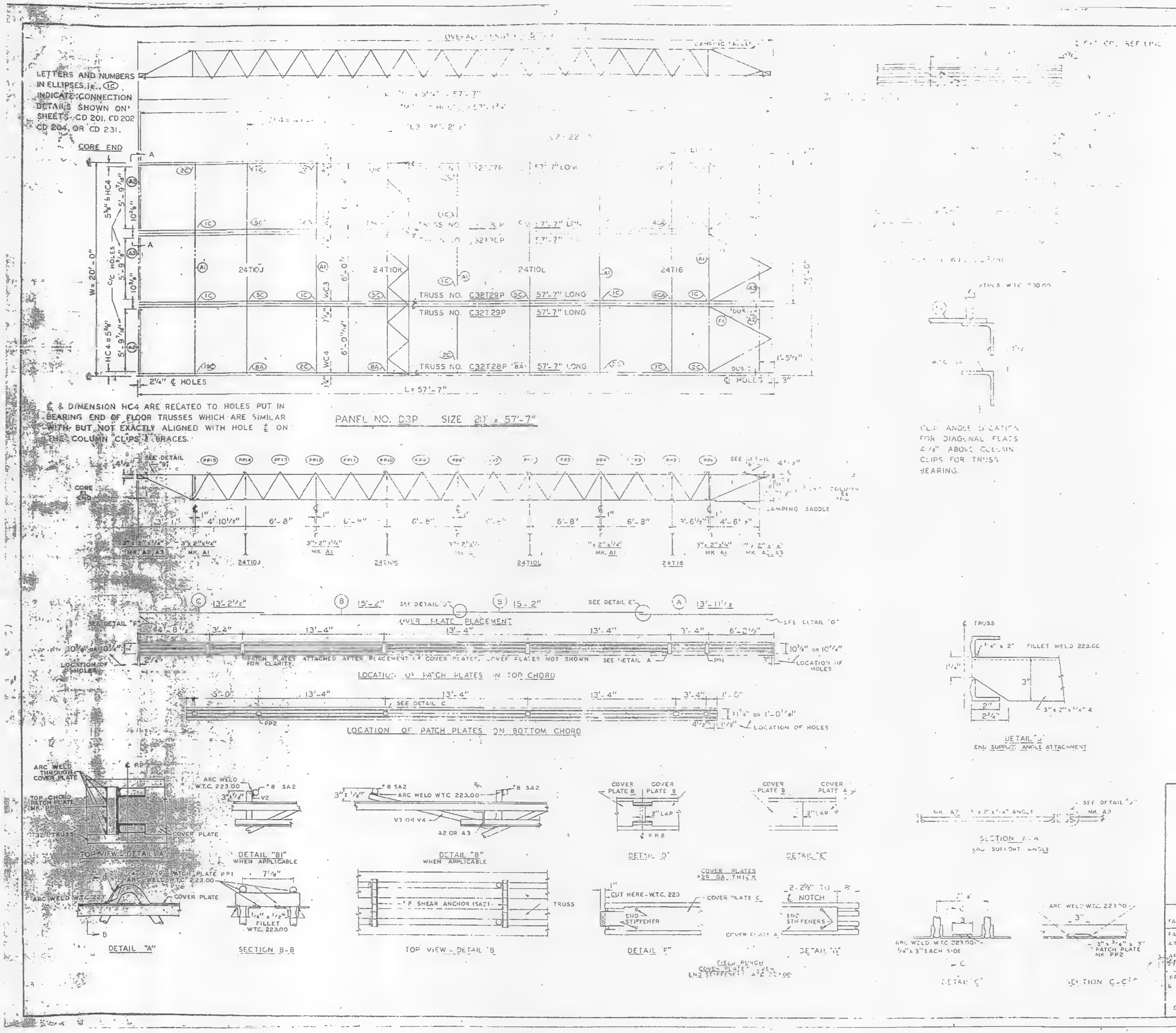
| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-47 | 1-6-69 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SP-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2 & 3 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
[illegible]
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (SOUTH)
PANEL D3C - 20' x 59'-8"
BLDG. B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR P. N. Y. A. DATE 7/31/69
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY CARL WEBER
LACLEDE STEEL CO.
DESIGN DRAWING NO 7-AB3-47
DRAWN BY gdc
DATE MARCH 26, 1969
CHECKED BY T M CHURA
DATE MARCH 26, 1969
FABRICATION CONT NO W T C 221
PLATE
IN CHARGE OF PROD DEV
SHEET NO. FP D3C

LACLEDE STEEL CO.


LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204, OR CD 231.
CORE END
W = 20'-0"
TRUSS NO. C32T29P 57'-7" LONG
TRUSS NO. C32T28P 57'-7" LONG
24T10J
24T10K
24T10L
24T16
L = 57'-7"
2¼" ℄ HOLES
℄ HOLES
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. D3P SIZE 20' x 57'-7"
CAMPING SADDLE
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES, COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES IN TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
DETAIL "A"
SECTION B-B
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
TOP VIEW - DETAIL B
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES #20 GA. THICK
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
DETAIL "C"
SECTION C-C

| [illegible] FOR PANEL | | | | FF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PC | SIZE | |
| | [illegible]7P | 1 | [illegible]7P 57'-7" | ST 227P |
| | [illegible]8P | [illegible] | [illegible]28P - 57'-7" | ST 228P |
| | [illegible]9P | 2 | [illegible]29P 57'-7" | ST 229P |
| | [illegible]P | [illegible] | [illegible]T30P - 57'-7" | ST 230P |
| | [illegible]J | 1 | [illegible] | [illegible] 210J |
| | [illegible]K | 1 | 24T10K [illegible] | [illegible]10K |
| | [illegible]L | [illegible] | 24T10L [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | ST 216 |
| | [illegible] | [illegible] | [illegible] | [illegible] 403 |
| | [illegible] | 4 | [illegible] | ST 403 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | # 8 REBAR x 0'-9" | ST 400 |
| CAMPING SADDLE | DUS-4 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | [illegible] | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION [illegible] | CS1 | 10 | 1" ɸ x 1'-3" | ST 400 |
| | | | | |
| CONNECTION PLATES | [illegible] | 4 | [illegible] x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4' 2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4' 2" x .39" x [illegible] 0" | ST 400 |
| | P4 | 3 | [illegible] x ½" x [illegible] | ST 400 |
| | P6 | 1 | 4' 2" x .39" x [illegible] | ST 401 |

NOTES: (1) ALL ARC WELDS TO BE MADE [illegible] LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

REF. DRWGS.

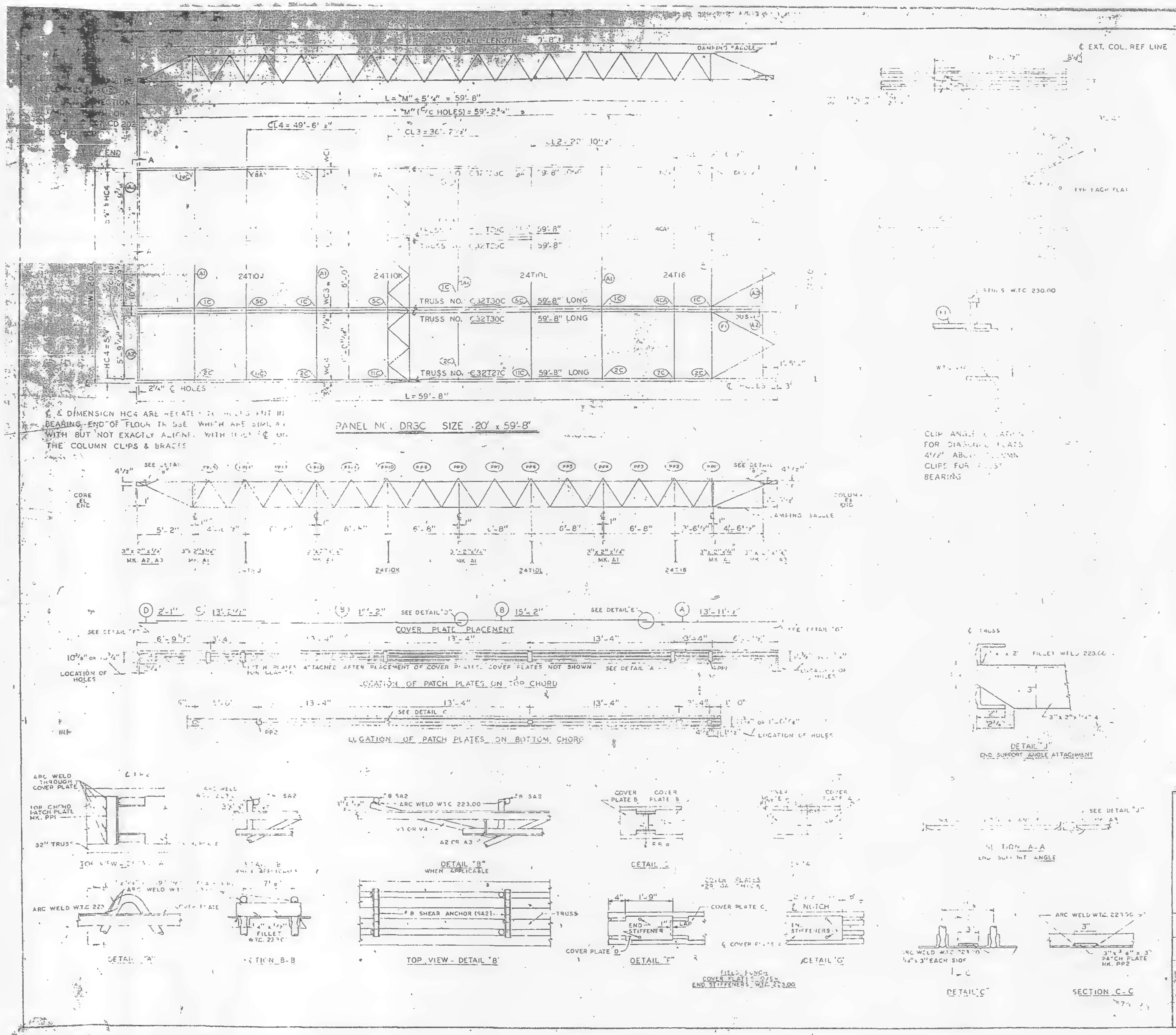
| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-47 | 1-6-69 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| S/-124 | 10-11-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2 & 3 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
[illegible] TRADE CENTER [illegible]
FOR
THE [illegible] NEW YORK AUTHORITY

BLDG. A FLOORS 78 (NORTH)
PANEL D3P - 20' x 57'-7"
BLDG. B FLOORS 78 (WEST)

FABRICATION BY [illegible] STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, [illegible] | | DESIGN DRAWING NO 7-A82-47 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR PONYA | DATE 7/4/69 | DRAWN BY [illegible] DATE MARCH 26 1969 | |
| APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR | DATE | CHECKED BY T.M CHUNA DATE MARCH 26, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT NO W T C 221 | SHEET NO FP D3P |



| PER PANEL | | | | REF DWG |
|---|---|---|---|---|
| | | PCS. | SIZE | |
| | 27C | | 27C - 59'-8" | ST 227C |
| | 28C | | 28C - 59'-8" | ST 228C |
| | 29C | | 29C - 59'-8" | ST 229C |
| | 30C | | 30C - 59'-8" | ST 230C |
| | J | | J | ST 210J |
| | K | | K | ST 210K |
| | L | | L | ST 210L |
| | | | | ST 216 |
| | | | | ST 403 |
| | | | | ST 403 |
| | | | | ST 403 |
| | | | | ST 402 |
| | | | | ST 405 |
| | | | | ST 400 |
| | | | | ST 303 |
| | | | | ST 303 |
| | | | | 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 2 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION | | 16 | 1" φ x 0'-3" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 6 1/2" | ST 400 |
| | P2 | | 4 1/2" x .39" x 0'-9" | ST 400 |
| | | | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P8 | 1 | 4 1/2" x .39" x 0'-4" | ST 401 |

NOTES: MADE WITH LOW HYDROGEN E-70 OR EQUAL
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" FULL THROAT FILLET

a = 1/4"
b = 1/4"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

REF DRWGS.

| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-48 | 1-6-69 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA 124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.

PORT OF NEW YORK AUTHORITY

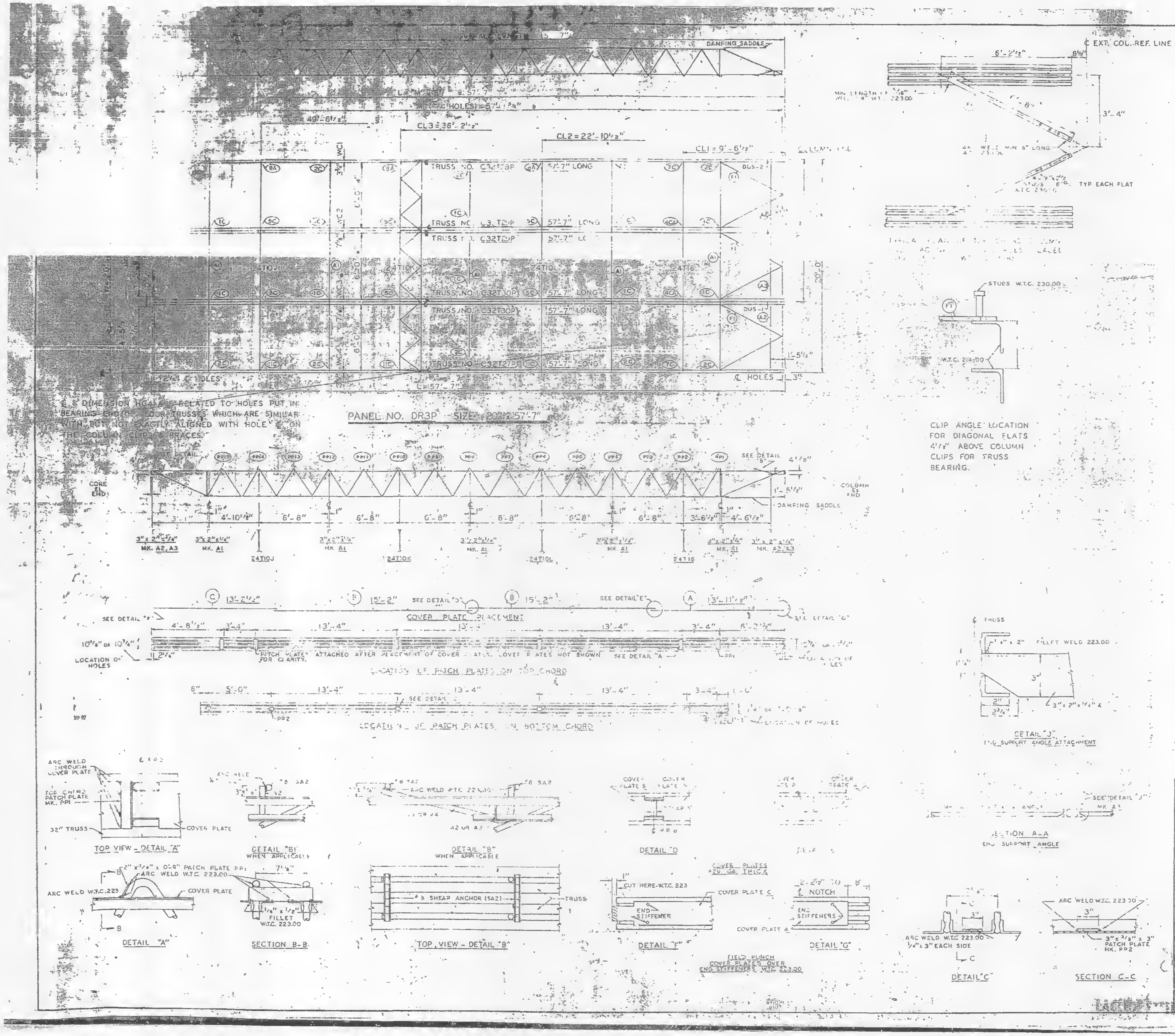
FLOORS 78 (SOUTH)

PANEL DR3C 20' x 59'-8"

BLDG. B FLOORS - 78 (EAST)

FABRICATED BY STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT | | DESIGN DRAWING NO. 7 AB3-48 1-6-69 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A | DATE 7/31/69 | DRAWN BY: gdc<br>DATE MARCH 26, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA<br>DATE MARCH 26, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP-DR3C |


DAMPING SADDLE
℄ EXT. COL. REF. LINE
CL3 = 38'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T28P 57'-7" LONG
TRUSS NO. C32T29P 57'-7" LONG
TRUSS NO. C32T30P 57'-7" LONG
TRUSS NO. C32T27P 57'-7" LONG
24T10J
24T10K
24T10L
24T16
℄ HOLES
DUS-2
DUS-1
L = 57'-7"
℄ & DIMENSION HOLES RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIP ANGLE BRACES.
PANEL NO. DR3P SIZE 20' x 57'-7"
TYP EACH FLAT
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4⅞" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
STUDS W.T.C. 230.00
W.T.C. 214.00
CORE ℄ END
COLUMN ℄ END
SEE DETAIL "B"
DAMPING SADDLE
3'-1"
4'-10½"
6'-8"
3'-6½"
4'-6½"
3" x 2" x ¼" MK. A2, A3
3" x 2" x ¼" MK. A1
COVER PLATE PLACEMENT
13'-2½"
15'-2"
13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
FILLET WELD 223.00
3" x 2" x ¼" x 4
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
#8 SA2
DETAIL "B1" WHEN APPLICABLE
ARC WELD W.T.C. 223.00
A2 OR A3
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
2" x ¼" x 0'-6" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
DETAIL "A"
¼" x 1½" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES 20 GA. THICK
CUT HERE-W.T.C. 223
COVER PLATE C
END STIFFENER
COVER PLATE A
DETAIL "F"
NOTCH
END STIFFENERS
DETAIL "G"
FIELD WELD COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x ⅜" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T27P | 1 | C32T27P - 57'-7" | ST 227P |
| | T28P | 1 | C32T28P - 57'-7" | ST 228P |
| | T29P | 2 | C32T29P - 57'-7" | ST 229P |
| | T30P | 2 | C32T30P - 57'-7" | ST 230P |
| BRIDGING TRUSSES | T10J | 1 | 24T10J - 19'-11" | 8T 210J |
| | T10K | 1 | 24T10K - 19'-11" | 8T 210K |
| | T10L | 1 | 24T10L - 19'-11" | 8T 210L |
| | T16 | 1 | 24T16 - 19'-11" | 8T 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 10'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1" x ⅝" x 6'-8 | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-6" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 10 | 1" ɸ x 1'-3" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x 1½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

| REF. DRWGS. | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-48 | 1-6-69 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (NORTH)

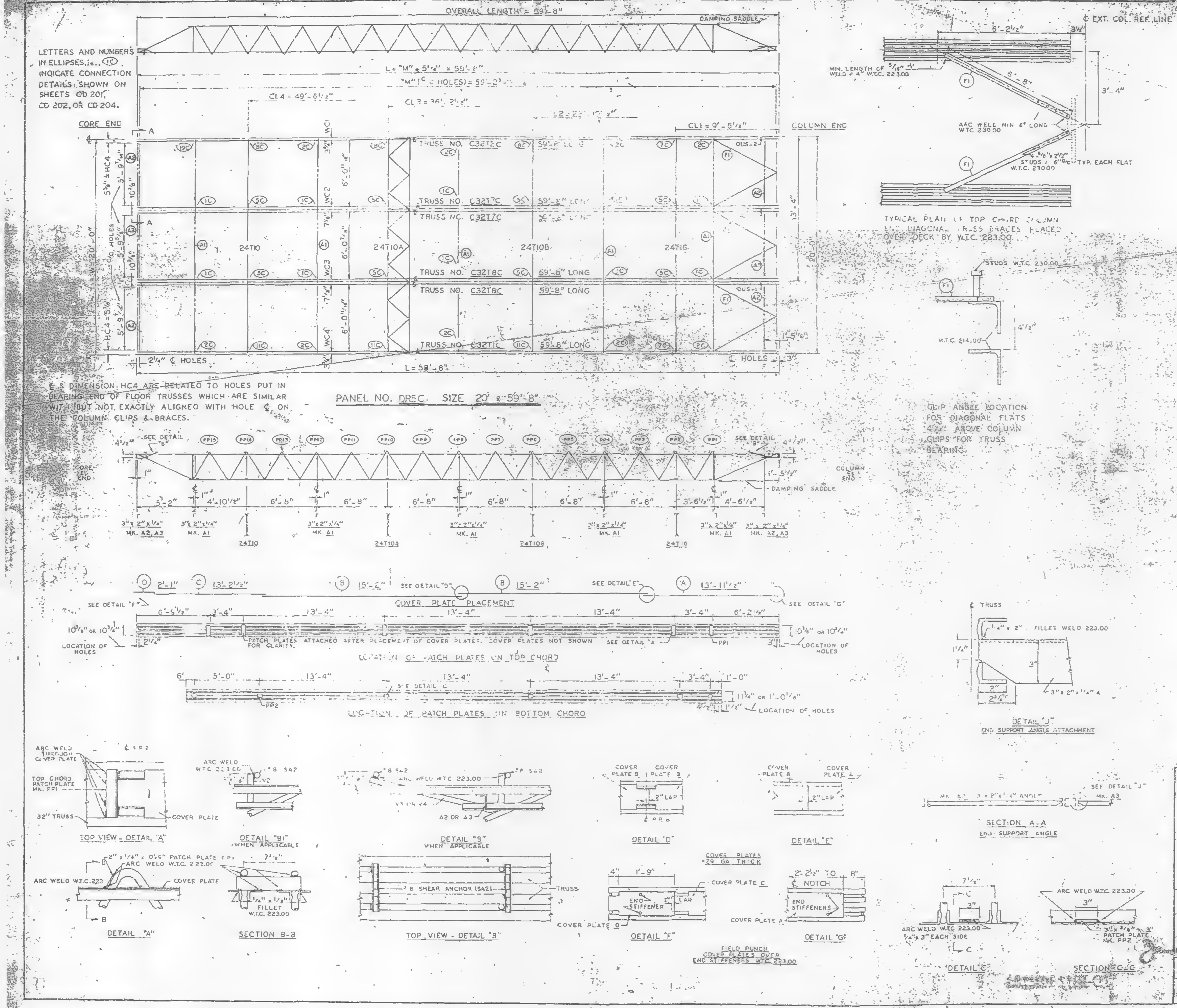
PANEL DR3P - 20' x 57'-7"

BLDG. B FLOORS - 78 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-48 1-6-69 | PLATE |
| APPROVED FOR FABRICATION FOR PONYA | DATE 7/31/69 | DRAWN BY: gdc DATE MARCH 26, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M. CHURA DATE MARCH 26, 1969 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO. DETAILED BY CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP ADR3P |

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.


OVERALL LENGTH = 59'-8"
DAMPING SADDLE
L = "M" + 5 1/4" = 59'-8"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T2C 59'-8" LONG
TRUSS NO. C32T7C 59'-8" LONG
TRUSS NO. C32T8C 59'-8" LONG
TRUSS NO. C32T1C 59'-8" LONG
24T10
24T10A
24T10B
24T16
2 1/4" ℄ HOLES
℄ HOLES
L = 59'-8"
13'-4"
20'-0"
CORE END
COLUMN END
DAMPING SADDLE
SEE DETAIL "B"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
℄ EXT. COL. REF. LINE
6'-2 1/2"
3 1/2"
3'-4"
6'-8"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG WTC 230.00
4-5/8" x 2 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
DETAIL "C"
SECTION C-C
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR5C. SIZE 20' x 59'-8"

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T1C | 1 | C32T1C - 59'-8" | ST 201C |
| | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T7C | 2 | C32T7C - 59'-8" | ST 207C |
| | T8C | 2 | C32T8C - 59'-8" | ST 208C |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 5/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1/2" x 1/4" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-5 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1 - 3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 5 1/2" x 1/2" x 0'-8" | ST 400 |
| | P5 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

1"
B
A = 1/4"
B = 1/4"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| 1 | 8-4-69 | AS NOTED | G.D.T. |

| REF. DRWGS. | | |
|---|---|---|
| | 7-AB2-5 & 11 | 7-22-88 |
| | 7-AB3-72 | 11-25-68 |
| | 7-AB4-3 | 10-15-68 |
| | 7-AB4-15 & 16 | 7-22-68 |
| | 7-AB4-42 | 10-15-68 |
| | SA-124 | 10-11-68 |
| | 7-AB1-5 | 10-15-68 |
| | 7-AB1-2, 3 & 4 | 7-22-68 |

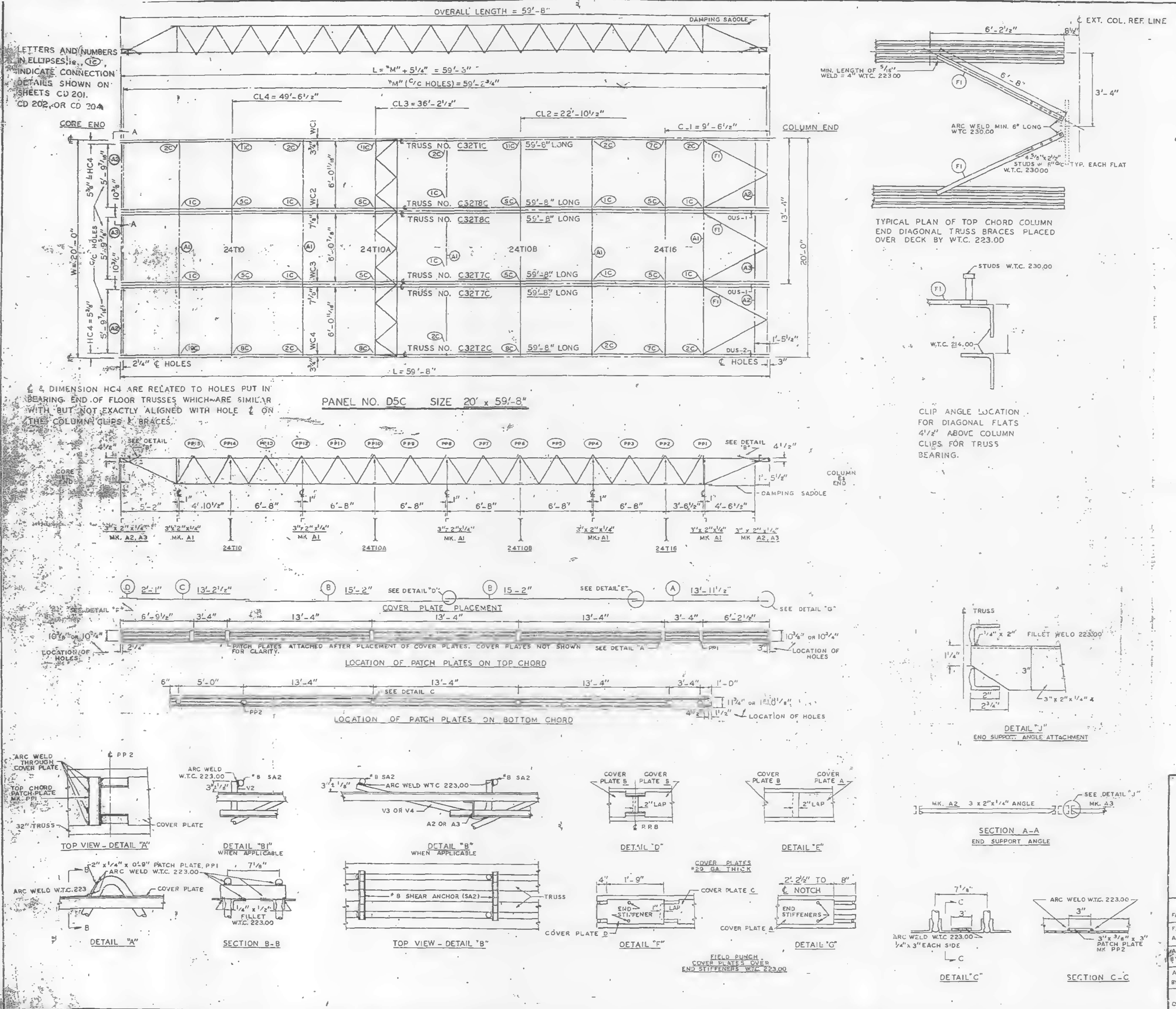
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 79 (SOUTH) 43 (SOUTH) ⚠1
PANEL DR5C 20' x 59'-8"
BLDG. B FLOORS 79 (EAST) 49 (EAST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-72 4-15-68 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A. | DATE 8/11/69 | DRAWN BY adc DATE JAN. 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA DATE JAN. 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP-DR5C |

LACLEDE STEEL CO.

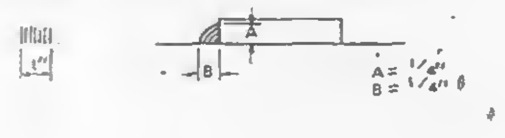


LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201. CD 202, OR CD 204

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1C | 1 | C32T1C - 59'-8" | ST 201C |
| | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T7C | 2 | C32T7C - 59'-8" | ST 207C |
| | T8C | 2 | C32T8C - 59'-8" | ST 208C |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 18'-11" | BT 210B |
| | T16 | 1 | 24T18 - 19'-11" | BT 218 |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-0" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1 - 3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .38" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
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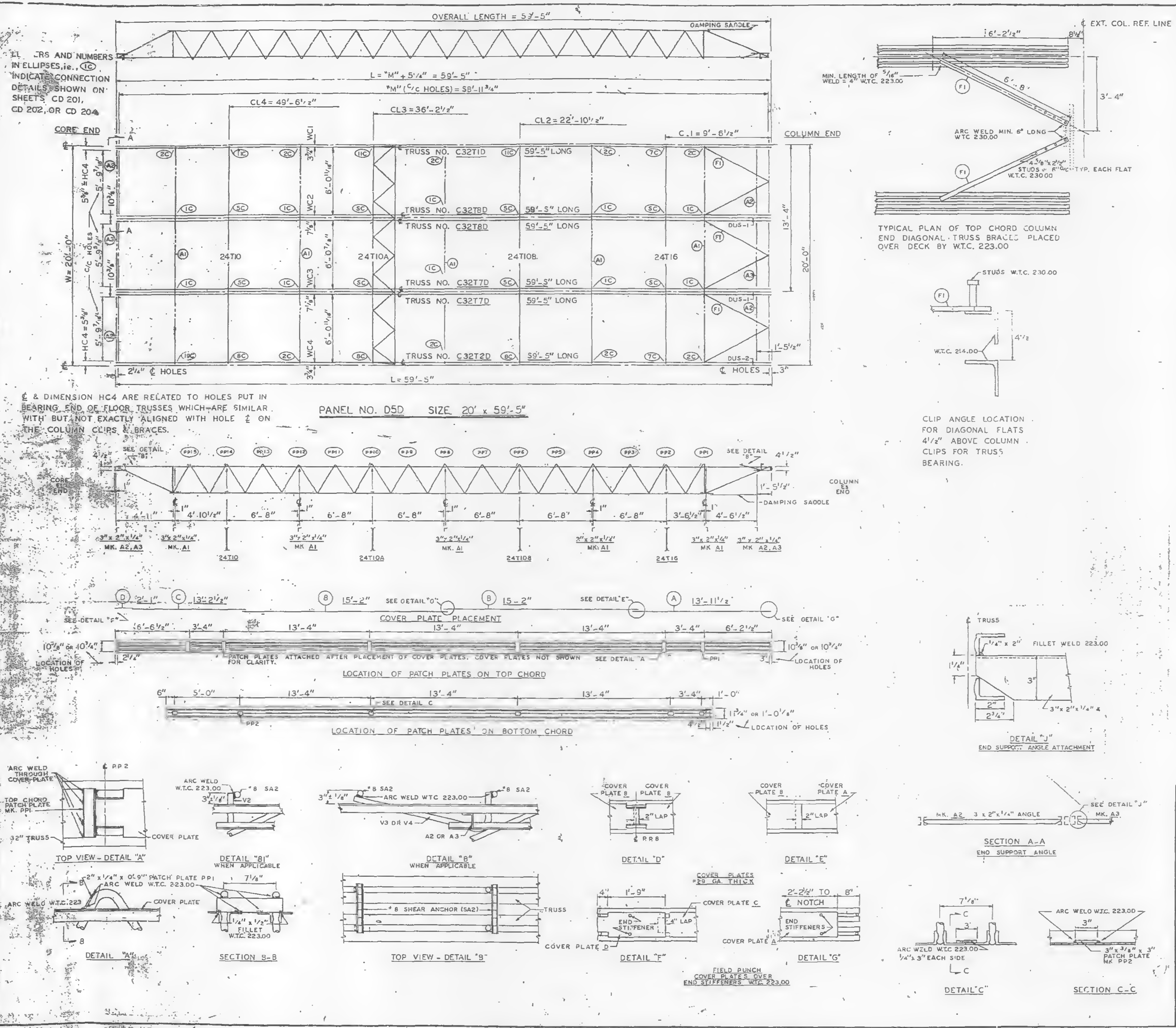
| REF. DRWGS. | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-71 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2 & 3 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 49 (SOUTH)
PANEL D5C - 20' x 59'-8"
BLDG. B FLOORS 49 (EAST)

FABRICATION BY: LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-71 | PLATE |
| APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. | DATE | DRAWN BY: gdc<br>DATE JAN. 14, 1969 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR. | DATE | CHECKED BY: T.M.CHURA<br>DATE JAN. 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: LACLEDE STEEL CO. | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP D5C |


OVERALL LENGTH = 59'-5"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
L = "M" + 5 1/4" = 59'-5"
"M" (C/C HOLES) = 58'-11 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T1D 59'-5" LONG
TRUSS NO. C32T8D 59'-5" LONG
TRUSS NO. C32T7D 59'-5" LONG
TRUSS NO. C32T2D 59'-5" LONG
24T10
24T10A
24T10B
24T16
W = 20'-0"
13'-4"
20'-0"
DUS-1
DUS-2
2 1/4" ℄ HOLES
℄ HOLES
L = 59'-5"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. D5D SIZE 20' x 59'-5"
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN. 6" LONG W.T.C. 230.00
STUDS W.T.C. 230.00
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B1"
SEE DETAIL "B"
DAMPING SADDLE
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
COVER PLATES #20 GA THICK
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
DETAIL "C"
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1D | 1 | C32T1D - 59'-5" | ST 201D |
| | T2D | 1 | C32T2D - 59'-5" | ST 202D |
| | T7D | 2 | C32T7D - 59'-5" | ST 207D |
| | T8D | 2 | C32T8D - 59'-5" | ST 208D |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ɸ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
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| REF. DRWGS. | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-71 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2 & 3 | 7-22-68 |

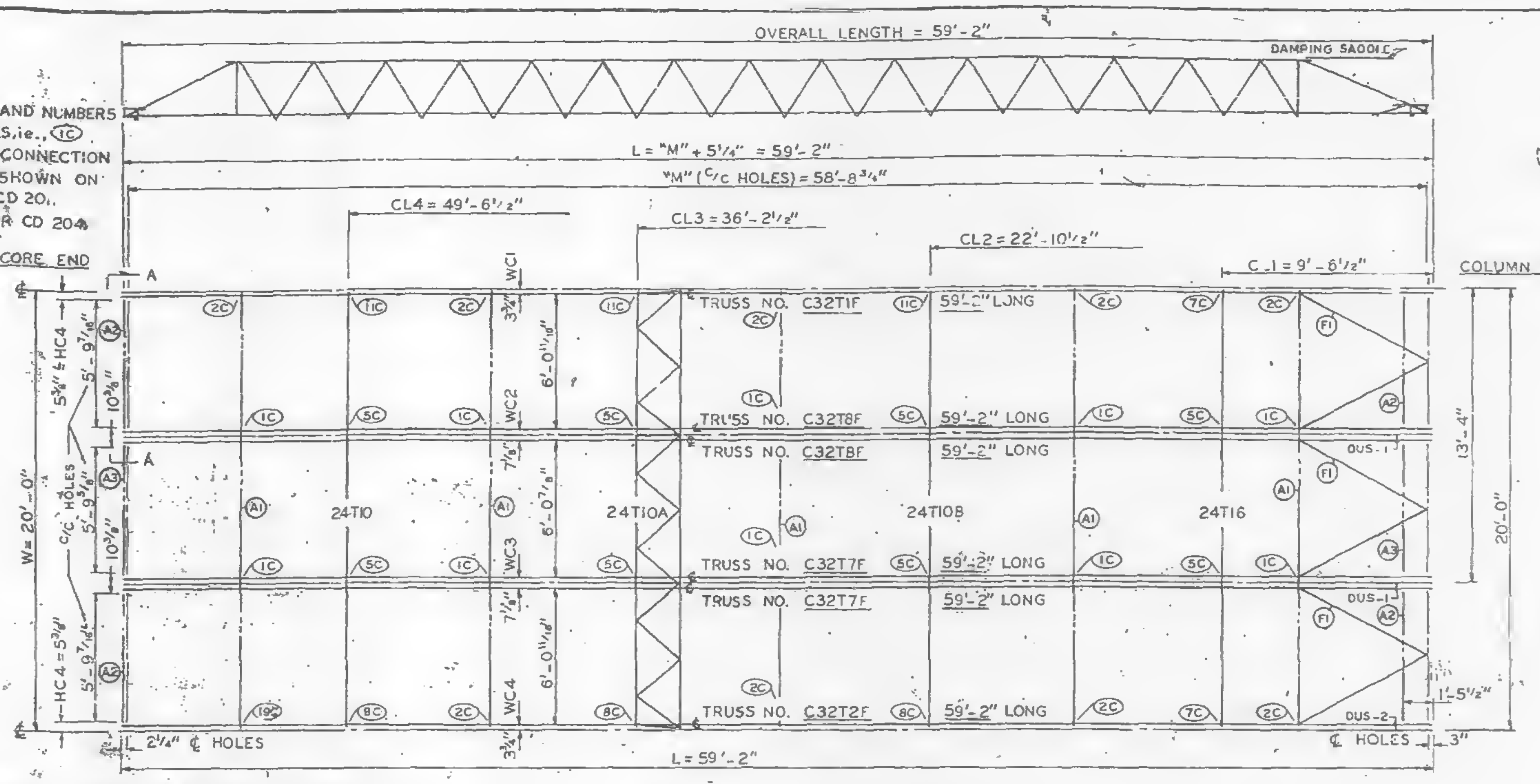
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 81-82 (NORTH)
PANEL D5D- 20' x 59'-5"
BLDG. B FLOORS 81-82 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

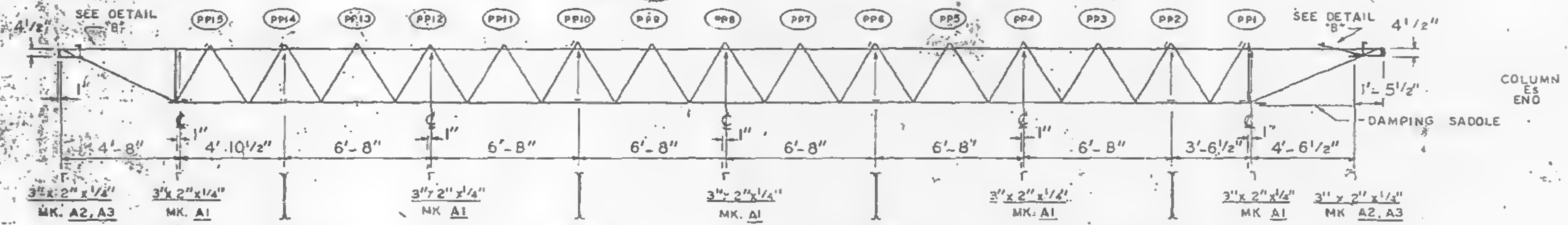
| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-71 | PLATE |
| APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. | DATE 7/31/69 | DRAWN BY: gdc<br>DATE JAN. 14, 1969 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA<br>DATE JAN. 14, 1969 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO.<br>DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP D5D |

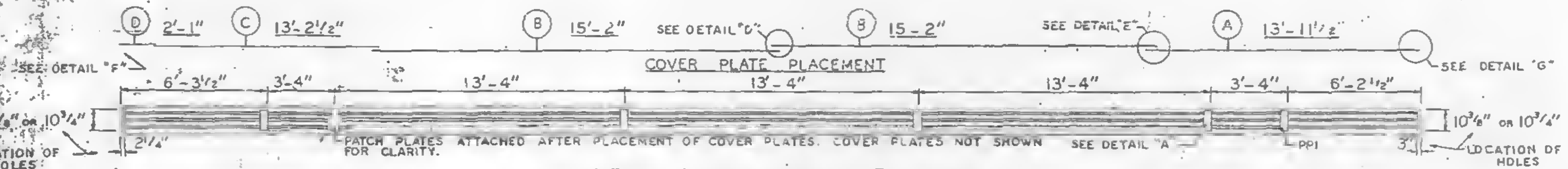
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.



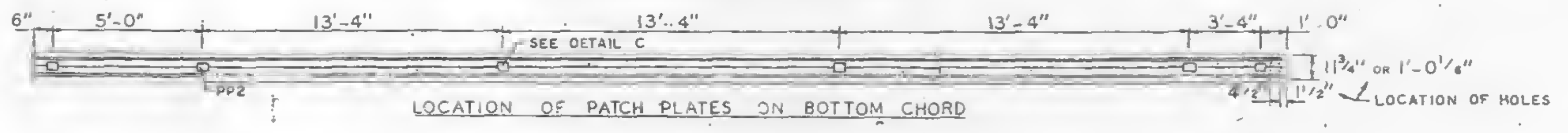
PANEL NO. D5F SIZE 20' x 59'-2"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

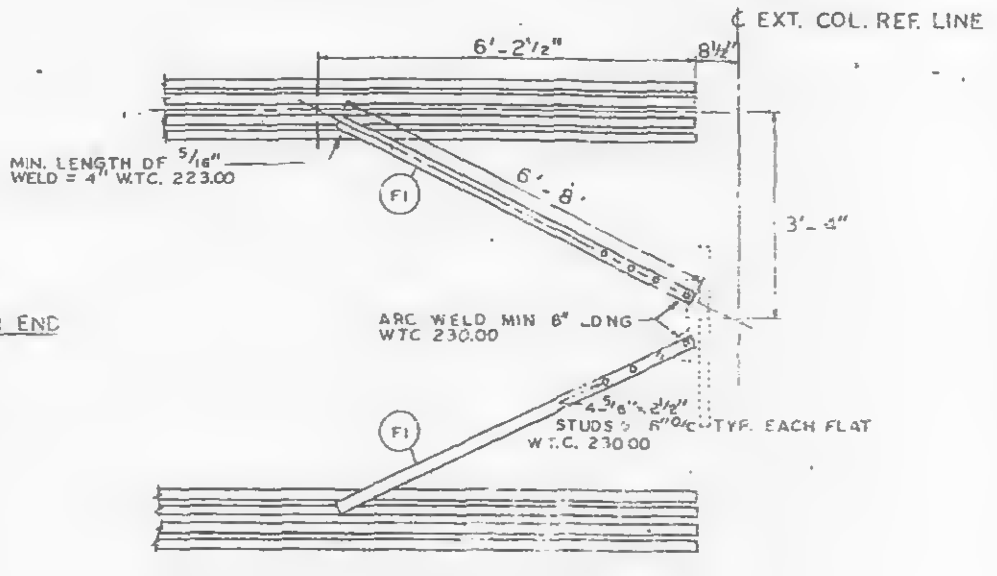




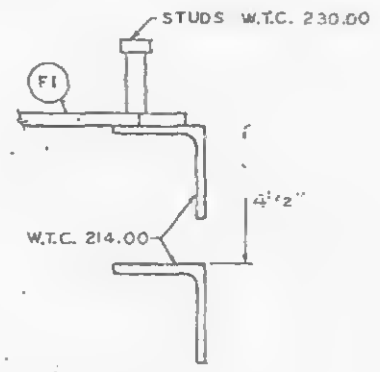
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD


℄ EXT. COL. REF. LINE
6'-2½"
8½"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
F1
6'-8
3'-4"
ARC WELD MIN 6" LONG W.T.C. 230.00
4 5/16" x 2½" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00

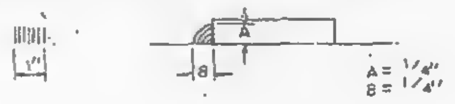
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

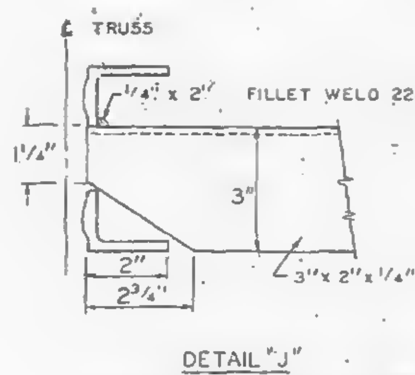


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL |  |  |  | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T1F | 1 | C32T1F - 59'-2" | ST 201F |
|  | T2F | 1 | C32T2F - 59'-2" | ST 202F |
|  | T7F | 2 | C32T7F - 59'-2" | ST 207F |
|  | T8F | 2 | C32T8F - 59'-2" | ST 208F |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
|  | T10A | 1 | 24T10A - 18'-11" | ST 210A |
|  | T10B | 1 | 24T10B - 16'-11" | ST 210B |
|  | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
|  | A2 | 4 | 3" x 2" x ¼" x 3'-11 7/16" | ST 403 |
|  | A3 | 2 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 8'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
|  | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
|  | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
|  | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
|  | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
|  | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1'-3" | ST 400 |
|  | CB4 | 6 | 1" ɸ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
|  | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
|  | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
|  | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
|  | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



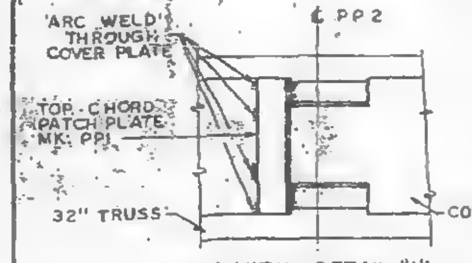


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

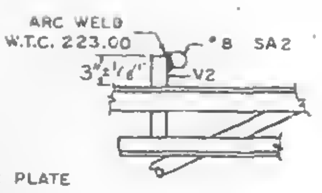
| NO. | DATE | REVISION | BY |
|---|---|---|---|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

REF. DRWGS.

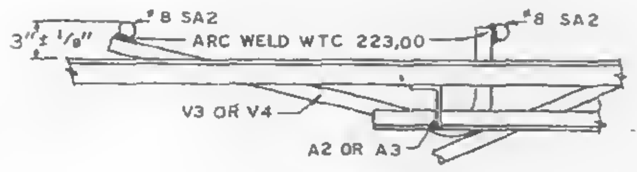
| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-71 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2 & 3 | 7-22-68 |



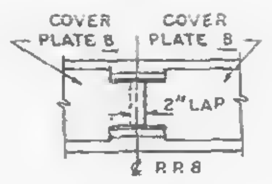
TOP VIEW - DETAIL "A"



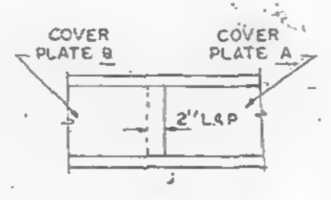
DETAIL "B1"
WHEN APPLICABLE



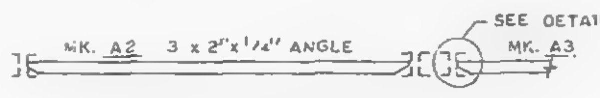
DETAIL "B"
WHEN APPLICABLE



DETAIL "D"

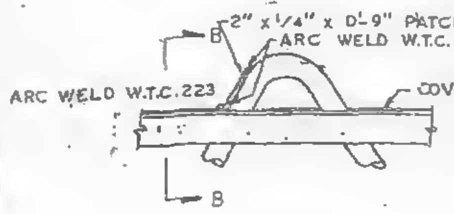


DETAIL "E"

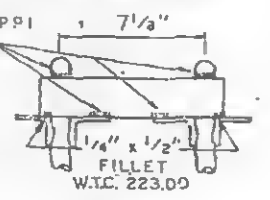


SECTION A-A
END SUPPORT ANGLE

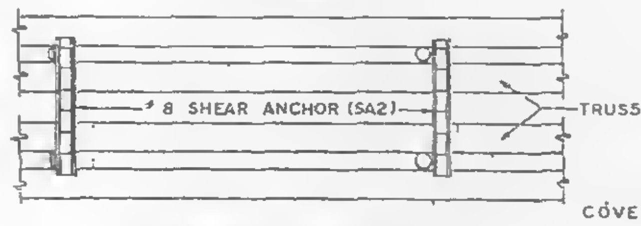
COVER PLATES
#29 GA. THICK



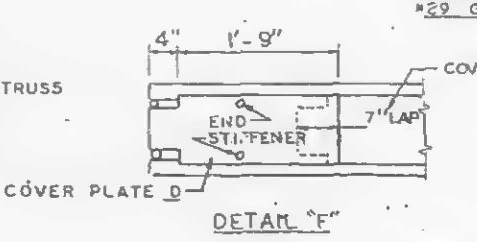
DETAIL "A"



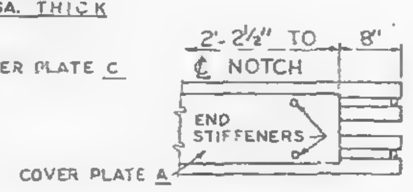
SECTION B-B



TOP VIEW - DETAIL "B"

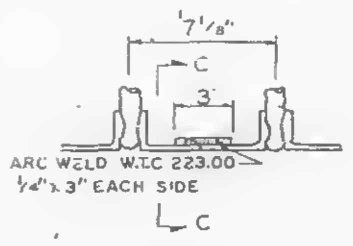


DETAIL "F"

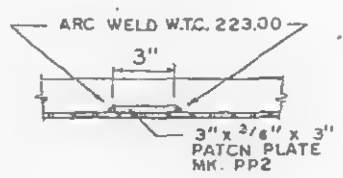


DETAIL "G"

FIELD PUNCH
COVER PLATES OVER
END STIFFENERS W.T.C. 223.00



DETAIL "C"



SECTION C-C

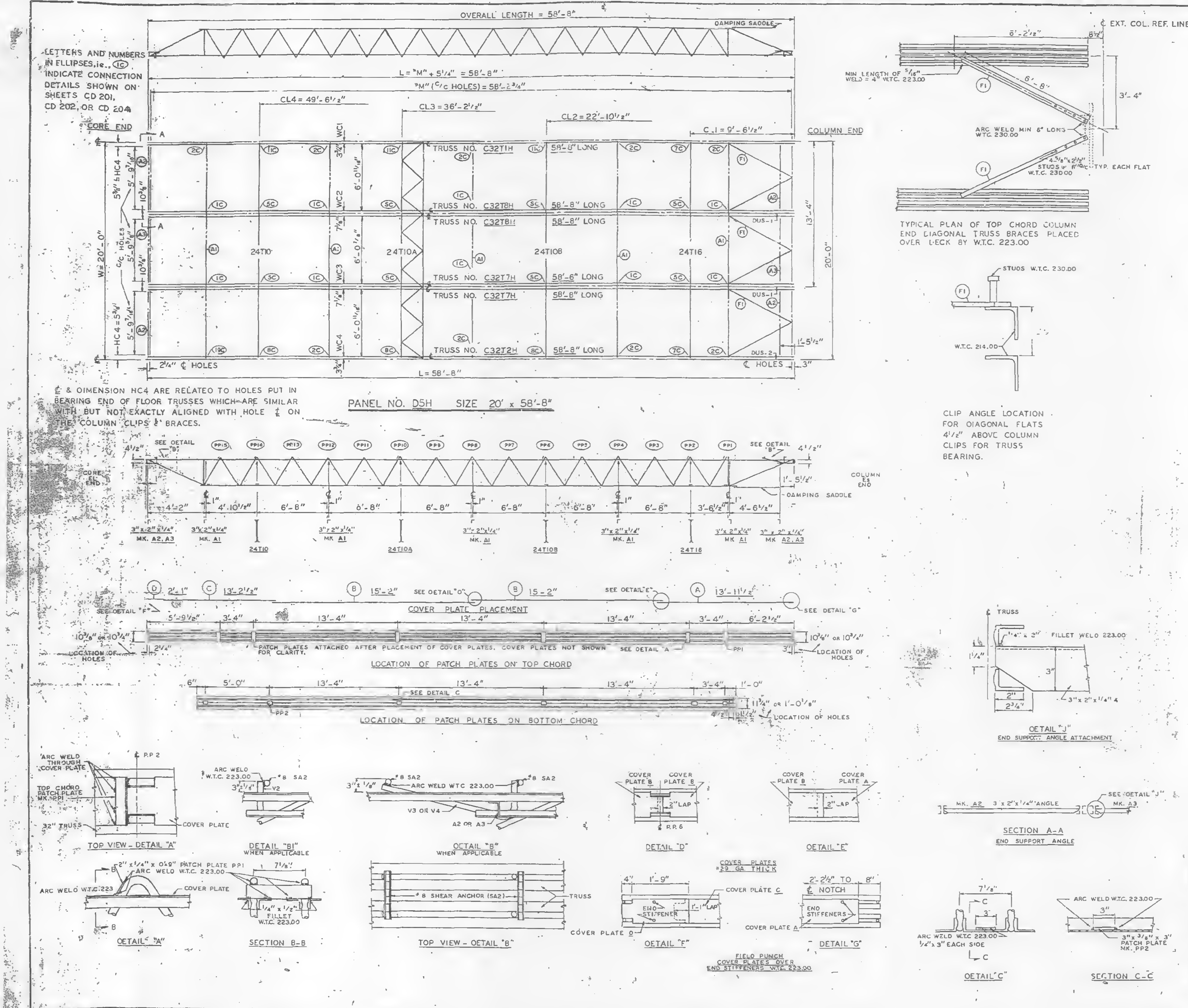
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47 & 48 (SOUTH)
PANEL D5F - 20' x 59'-2"
BLDG. B FLOORS 47 & 48 (EAST)

FABRICATION BY: LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-71 | PLATE |
| APPROVED FOR FABRICATION BY: D. W. FOR P.O.N.Y.A. | DATE 7/31/69 | DRAWN BY: gdc DATE JAN 14, 1969 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA DATE JAN. 14, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP D5F |

LACLEDE STEEL CO.



LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

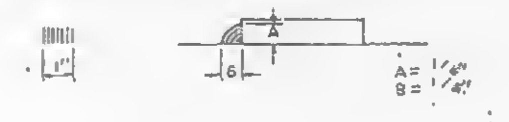
₵ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ₵ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL<br>MATERIAL | MK. | PCS | SIZE | REF. DRWG. |
|---|---|---|---|---|
| FLOOR TRUSSES | T1H | 1 | C32T1H - 58'-6" | ST 201H |
| | T2H | 1 | C32T2H - 58'-8" | ST 202H |
| | T7H | 2 | C32T7H - 58'-8" | ST 207H |
| | T8H | 2 | C32T8H - 58'-8" | ST 208H |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 18'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 218 |
| 3"x 2"x¼" ANGLE | A1 | 5 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼" x 5'-11⅞" | ST 403 |
| | A3 | 2 | 3"x 2"x¼" x 5'-11¾" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1½" x ⅝" x 8'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 8 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2"x1½" x¼"x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x⅜"x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½"x 3½"x⅜"x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" φ x 1 - 3" | ST 400 |
| | CB4 | 6 | 1" φ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½"x⅜"x 6½" | ST 400 |
| | P2 | 1 | 4½"x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

REF. DRWGS.

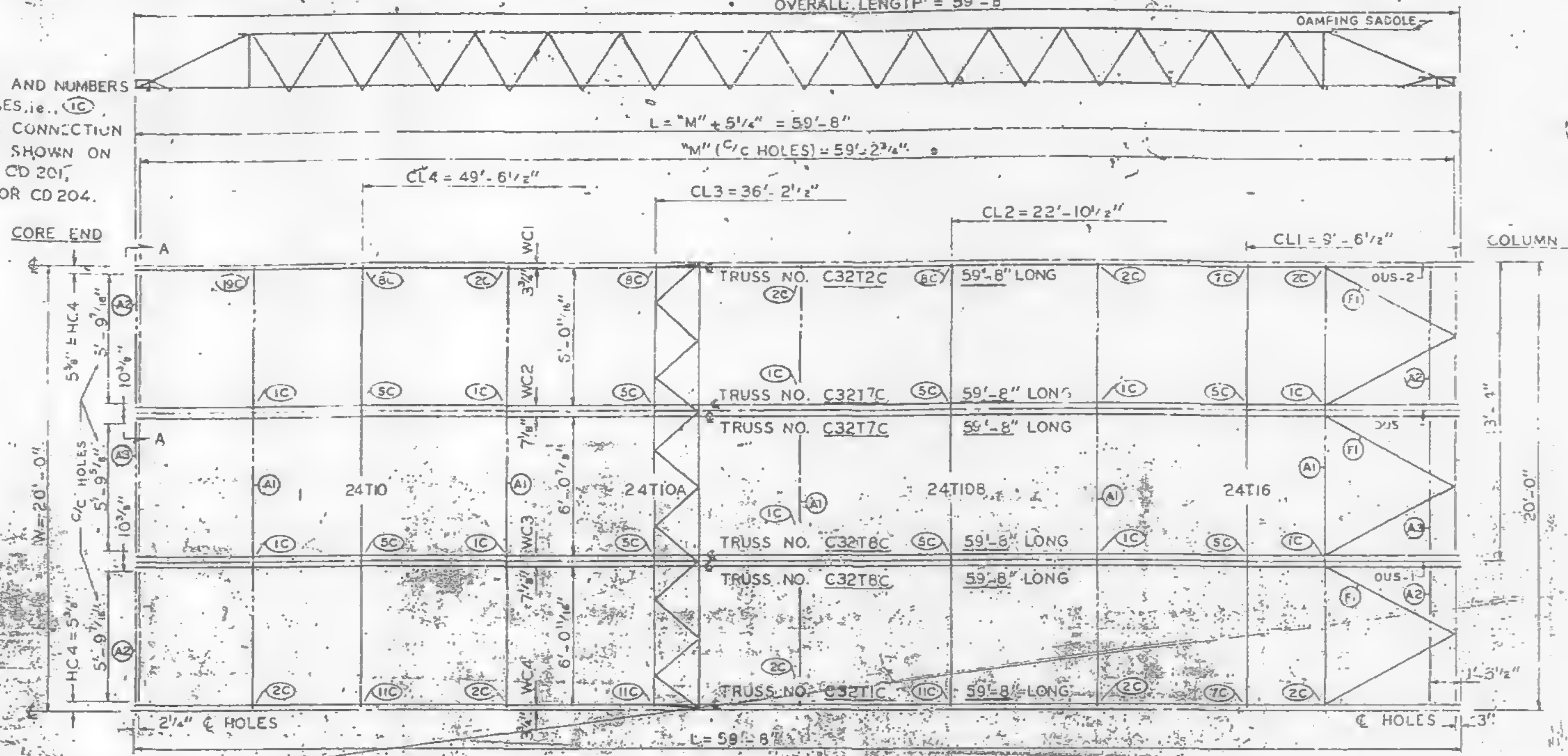
| | |
|---|---|
| 7-A92-5 & 11 | 7-22-66 |
| 7-A83-71 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2 & 3 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 79-80 (NORTH)
PANEL D5H - 20' x 58'-8"
BLDG. B FLOORS 79-80 (WEST)

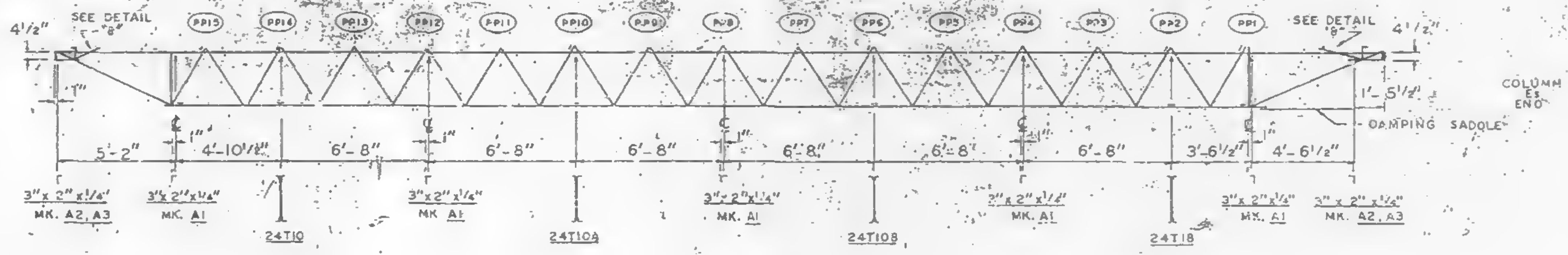
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-71
PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE 7/31/69
DRAWN BY: gdc DATE JAN. 14, 1969
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE JAN. 14, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY: LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP D5H

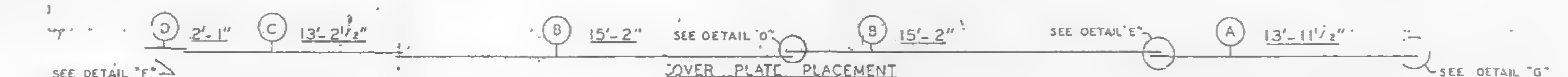
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.



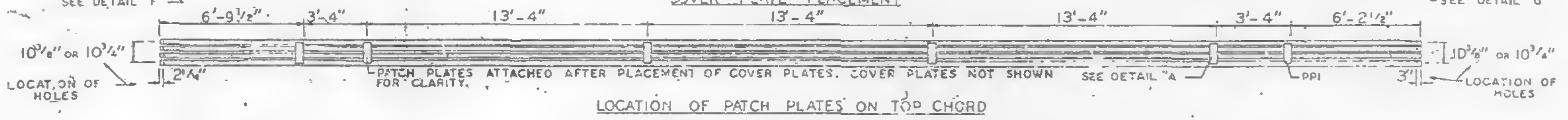
PANEL NO. DR5C SIZE 20' x 59'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

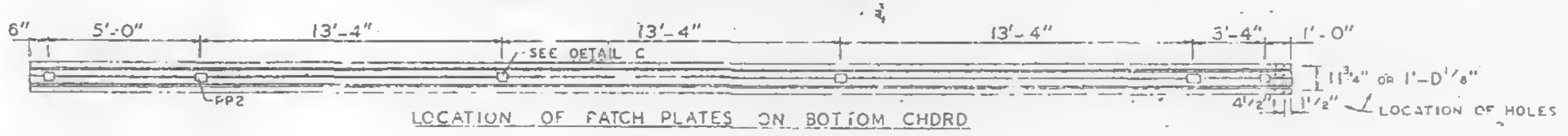




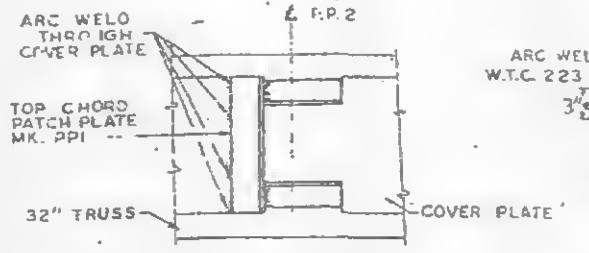
COVER PLATE PLACEMENT



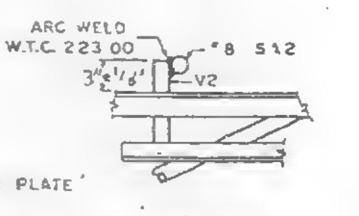
LOCATION OF PATCH PLATES ON TOP CHORD



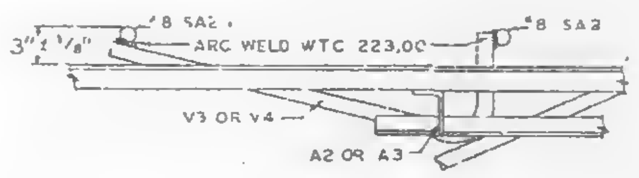
LOCATION OF PATCH PLATES ON BOTTOM CHORD



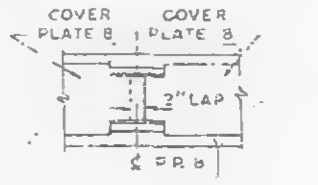
TOP VIEW - DETAIL "A"



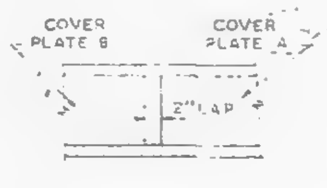
DETAIL "B1"
WHEN APPLICABLE



DETAIL "B"
WHEN APPLICABLE

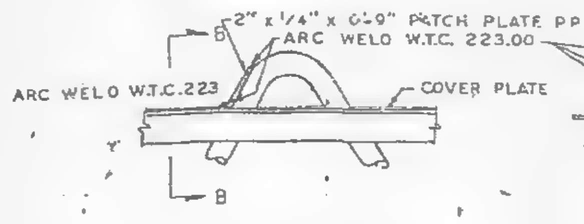


DETAIL "D"

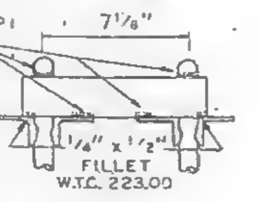


DETAIL "E"

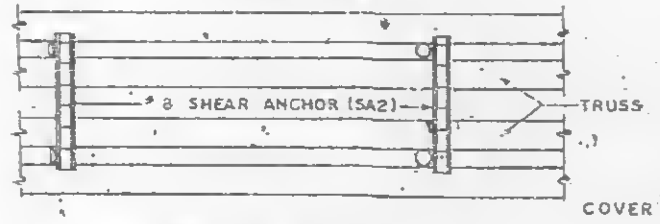
COVER PLATES #29 GA THICK



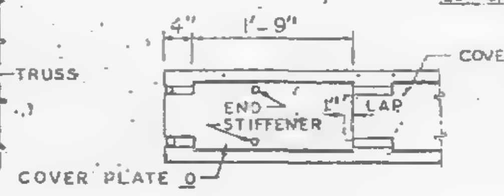
DETAIL "A"



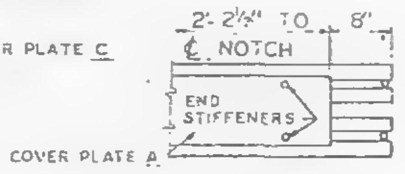
SECTION B-B



TOP VIEW - DETAIL "B"

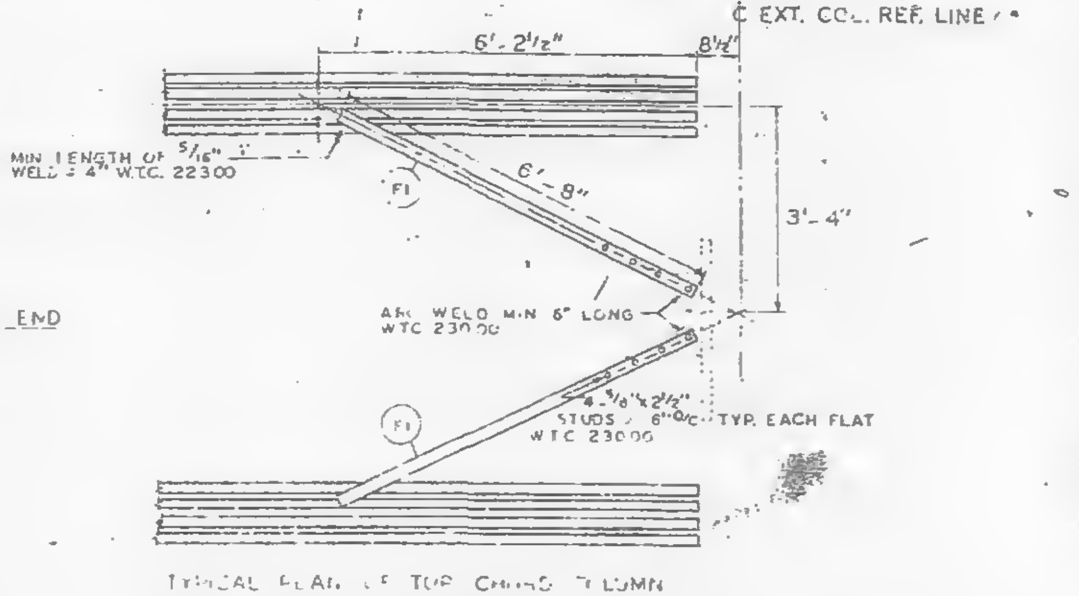


DETAIL "F"

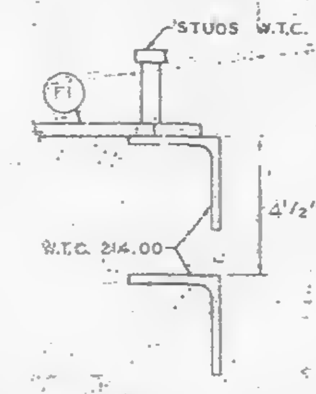


DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00


℄ EXT. COL. REF. LINE
6'-2½"
8½"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN 6" LONG W.T.C. 230.00
4 - ⅜" x 2½" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
F1

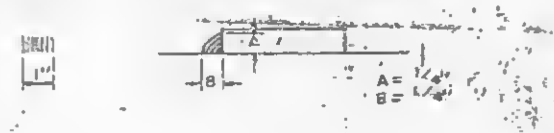
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

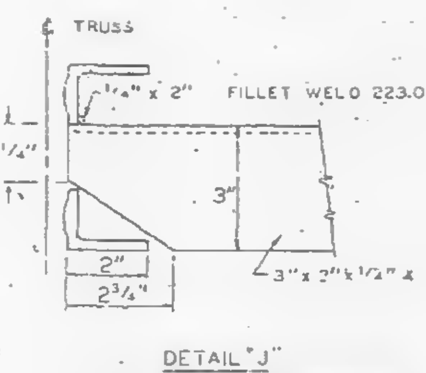


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

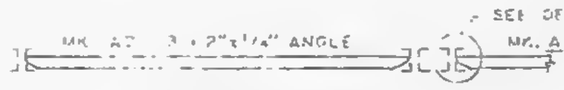
| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1C | 1 | C32T1C - 59'-8" | ST 201C |
| | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T7C | 2 | C32T7C - 59'-8" | ST 207C |
| | T8C | 2 | C32T8C - 59'-8" | ST 208C |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | 1'-3" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

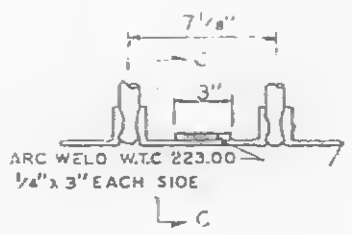




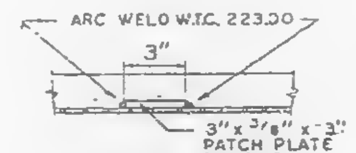
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL C



SECTION C-C

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

| REF. DRWGS. | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-72 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2, 3 & 4 | 7-22-68 |

SKILLING - HELLE CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 7/31/69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

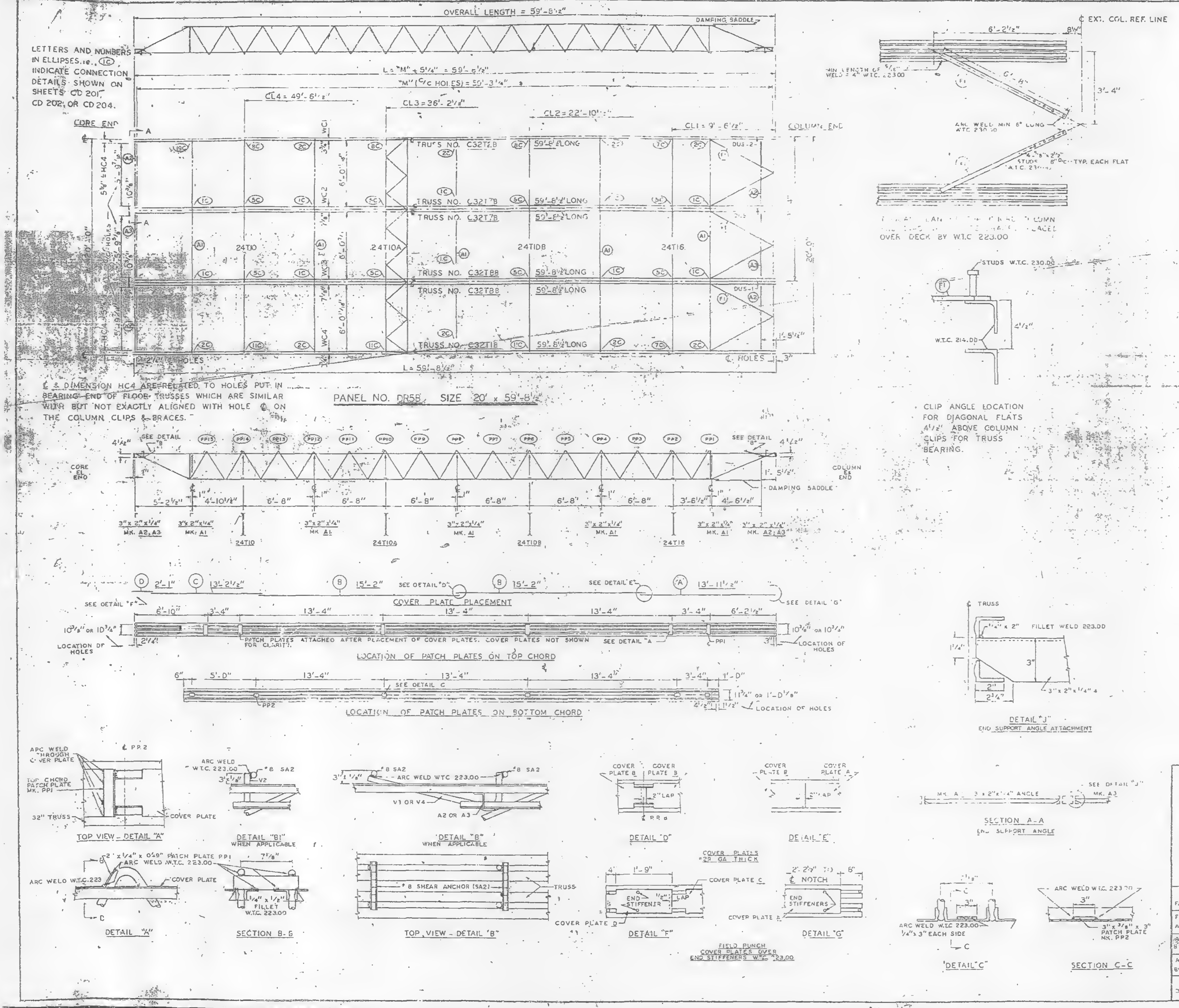
BLDG. A FLOORS 79 (SOUTH) 49 (SOUTH)
PANEL DR5C - 20' x 59'-8"
BLDG. B FLOORS 79 (EAST) 49 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING, NO. 7-AB3-72 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. | DATE | DRAWN BY: gdc<br>DATE JAN. 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M. CHURA<br>DATE JAN. 14, 1969 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO.<br>DETAILED BY CARL WEBER | | FABRICATION CONT. NO. WTC 221 | SHEET NO. FP DR5C |

300-379

WTC1-131-LERA


OVERALL LENGTH = 59'-8½"
DAMPING SADDLE
CORE END
COLUMN END
TRUSS NO. C32T2B 59'-8½" LONG
TRUSS NO. C32T7B 59'-8½" LONG
TRUSS NO. C32T8B 59'-8½" LONG
TRUSS NO. C32T1B 59'-8½" LONG
24T10
24T10A
24T10B
24T16
PANEL NO. DR5B, SIZE 20' x 59'-8½"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
DETAIL "C"
SECTION C-C
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
COVER PLATES #20 GA THICK

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | |
| FLOOR TRUSSES | T1B | 1 | C32T1B - 59'-8½" | ST 201B |
| | T2B | 1 | C32T2B 59'-8½" | ST 202B |
| | T7B | 2 | C32T7B - 59'-8½" | ST 207B |
| | T8B | 2 | C32T8B - 59'-8½" | ST 208B |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | 1 | 24T10A - 19'-11" | ST 210A |
| | T10B | 1 | 24T10B - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - 19'-11" | ST 216 |
| 3" x 2" x ¼" ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅜" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 12 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 8½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-8" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ⅛"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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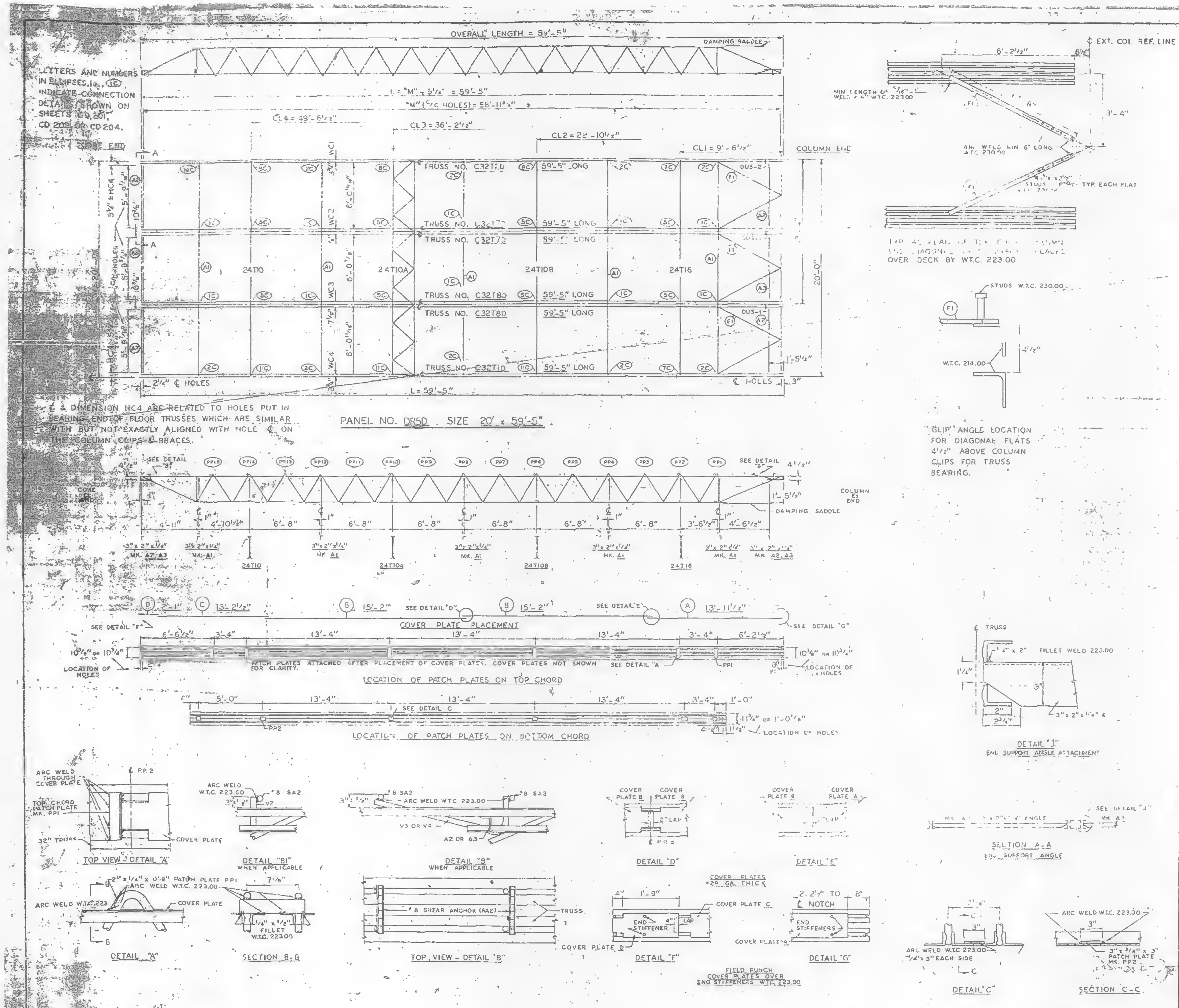
REF. DRWGS.

| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-72 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A31-5 | 10-15-68 |
| 7-A81-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)
PANEL DR5B - 20' x 59'-8½"
BLDG. B FLOORS 83 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-72 4-15-68
PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 7/31/69
DRAWN BY: gdc DATE JAN. 14, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
LACLEDE STEEL CO.
CHECKED BY: T.M. CHURA DATE JAN. 14, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO. FP DR5B



LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

¢ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES.

TYP. AT FLATS OF THE COLUMN AND DIAGONAL [illegible] PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T1D | 1 | C32T1D - 59'-5" | ST 201D |
| | T2D | 1 | C32T2D - 59'-5" | ST 202D |
| | T7D | 2 | C32T7D - 59'-5" | ST 207D |
| | T8D | 2 | C32T8D - 59'-5" | ST 208D |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 218 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 7/8" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/8" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-[illegible] | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" φ x 1'-3" | ST 400 |
| | CB4 | 8 | 1" φ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
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REF. DRWGS.

| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-72 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-5 | 10-15-68 |
| 7-A81-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

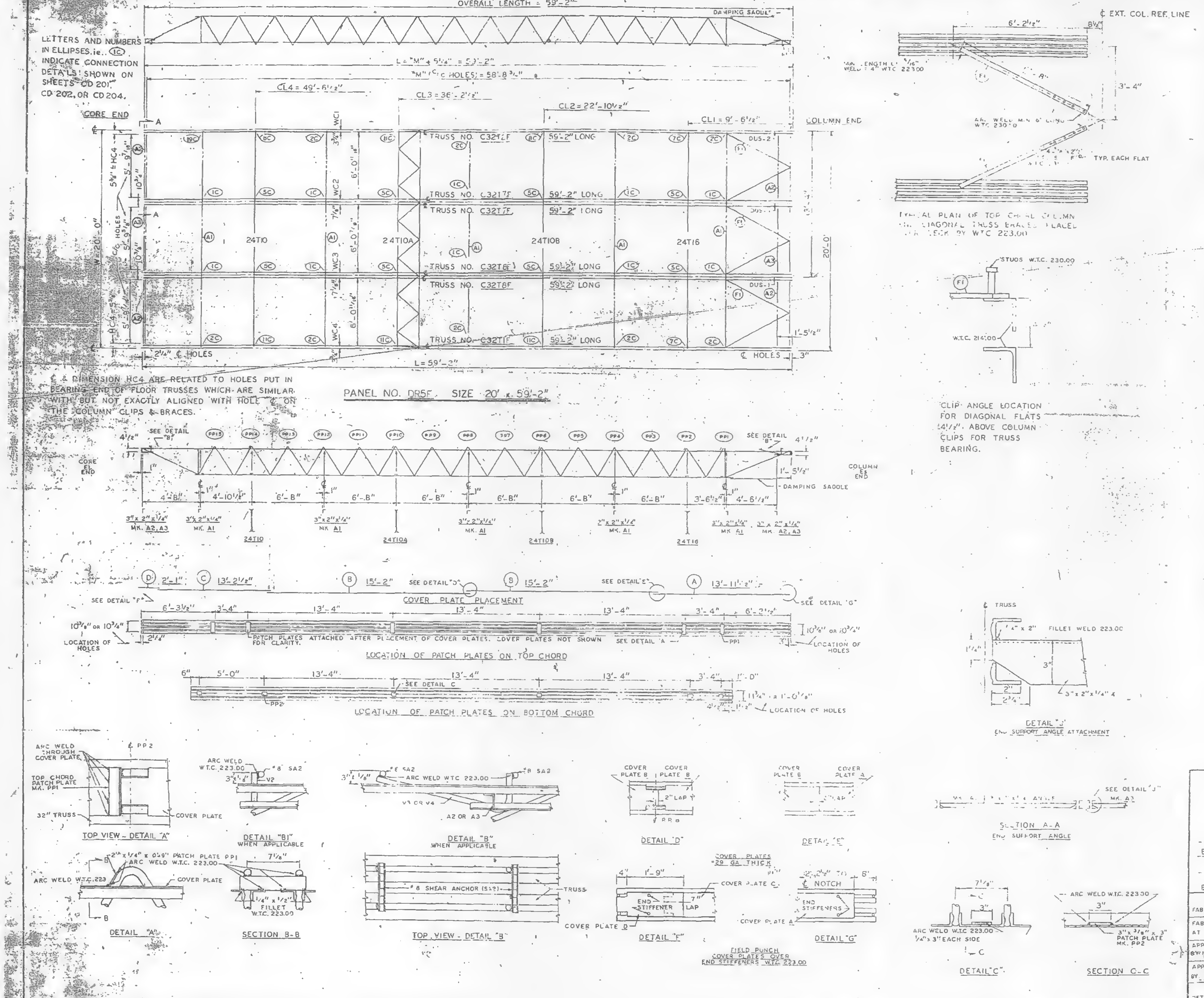
BLDG. A FLOORS 81 & 82 (NORTH)
PANEL DR5D - 20' x 59'-5"
BLDG. B FLOORS 81 & 82 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-A83-72 4-15-68 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 7/31/69 | DRAWN BY: gdc DATE JAN. 14, 1969 | |
| APPROVED FOR FABRICATION BY LACLEDE STEEL CO. DATE | CHECKED BY: T.M. CHURA DATE JAN. 14, 1969 | IN CHARGE OF PROD. [illegible] |
| DETAILED BY: CARL WEBER | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. EP DR5D |

LACLEDE STEEL CO.

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.


OVERALL LENGTH = 59'-2"
DAMPING SADDLE
L = "M" + 5 1/4" = 59'-2"
"M" ℄ HOLES = 58'-8 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T2F 59'-2" LONG
TRUSS NO. C32T7F 59'-2" LONG
TRUSS NO. C32T7F 59'-2" LONG
TRUSS NO. C32T8F 59'-2" LONG
TRUSS NO. C32T8F 59'-2" LONG
TRUSS NO. C32T1F 59'-2" LONG
24T10
24T10A
24T10B
24T16
WC1
WC2
WC3
WC4
DUS-2
DUS-1
W = 20'-0"
20'-0"
2 1/4" ℄ HOLES
℄ HOLES
L = 59'-2"
PANEL NO. DR5F SIZE 20' x 59'-2"
SEE DETAIL "B"
CORE ℄ END
COLUMN ℄ END
DAMPING SADDLE
3" x 2" x 1/4" MK. A2, A3
3" x 2" x 1/4" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
℄ EXT. COL. REF. LINE
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN WITH DIAGONAL TRUSS BRACES PLACED FOR DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
FILLET WELD 223.00
SECTION A-A
END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
DETAIL "C"
SECTION C-C
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
COVER PLATES 29 GA. THICK

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1F | 1 | C32T1F - 59'-2" | ST 201F |
| | T2F | 1 | C32T2F - 59'-2" | ST 202F |
| | T7F | 2 | C32T7F - 59'-2" | ST 207F |
| | T8F | 2 | C32T8F - 59'-2" | ST 208F |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 5/8" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 5/8" | ST 403 |
| DIAGONAL FLATS | F1 | 8 | [illegible] x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-3" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x 0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x 0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/4" x 3'-6 3/8" | ST 298 |
| | DUS-2 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB4 | 8 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | [illegible] | 4 1/2" x .39" x 0'-9 5/8" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

REF DRWGS.

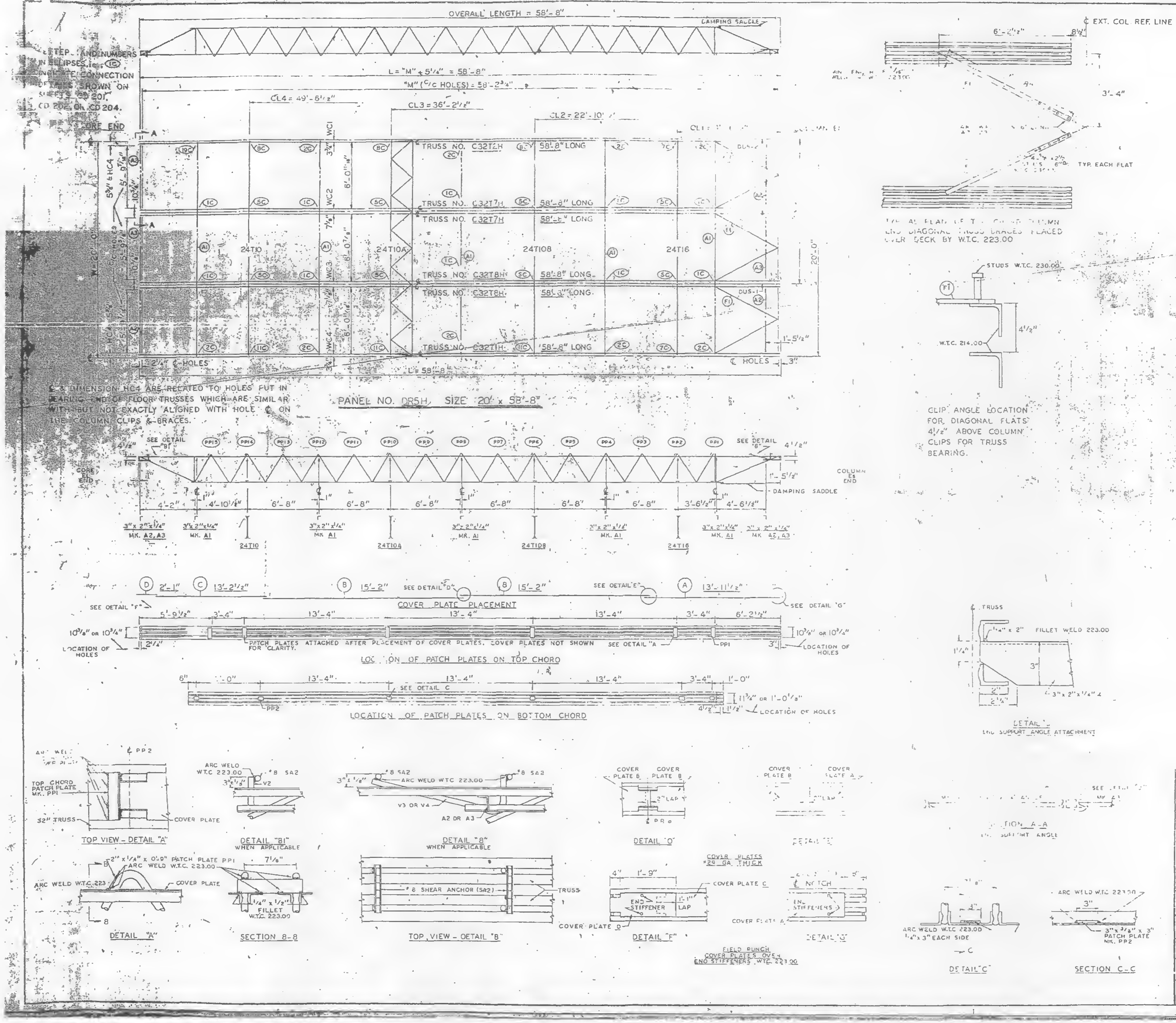
| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-72 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-5 | 10-15-68 |
| 7-AB1-2, 3 & 4 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47 & 48 (SOUTH)
PANEL DR5F - 20' x 59'-2"
BLDG. B FLOORS 47 & 48 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7 AB3-72 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. | DATE 7/31/69 | DRAWN BY: adc<br>DATE JAN. 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA<br>DATE JAN. 14, 1969 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO.<br>DETAILED BY CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DR5F |



| REQUIRED MATERIAL PER PANEL | | | | REF |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T1H | 1 | C32T1H - 58'-8" | ST 201H |
| | T2H | 1 | C32T2H - 58'-8" | ST 202H |
| | T7H | 2 | C32T7H - 58'-8" | ST 207H |
| | T8H | 2 | C32T8H - 58'-8" | ST 208H |
| BRIDGING [illegible] | T10 | 1 | 24T10 - 19'-11" | ST 210 |
| | T10A | [illegible] | 24T10A - [illegible] 11" | ST 210A |
| | T08 | 1 | 24T108 - 19'-11" | ST 210B |
| | T16 | 1 | 24T16 - [illegible] | ST 21[illegible] |
| 3"x [illegible] | A1 | 5 | 3" x 2" x 1/4" x [illegible] | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11[illegible] | ST 403 |
| DIA[illegible] | [illegible] | 2 | [illegible] x 5/8" x 6'-6" | ST 402 |
| PAT[illegible] | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-2" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-5[illegible] | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x [illegible] | ST 298 |
| | DUS-2 | [illegible] | 3 1/2" x 3 1/2" x [illegible] | ST 298 |
| CONNECTION BAR | CB1 | 4 | [illegible] | ST 400 |
| | CB4 | 6 | [illegible] x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x [illegible] | ST 400 |
| | P2 | [illegible] | 4 1/2" x .39" x 0'-[illegible] | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P5 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/8"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |

REF. DRWGS.

| | |
|---|---|
| 7-AB2-5 & 11 | 7-22-68 |
| 7-AB3-72 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA 124 | 10-11-68 |
| 7-AB-5 | 10-15-68 |
| [illegible]1-2, 3 & 4 | 7-22-68 |

FLOOR PAN[illegible] DETAILS

[illegible]

THE PORT OF NEW YORK AUTHORITY

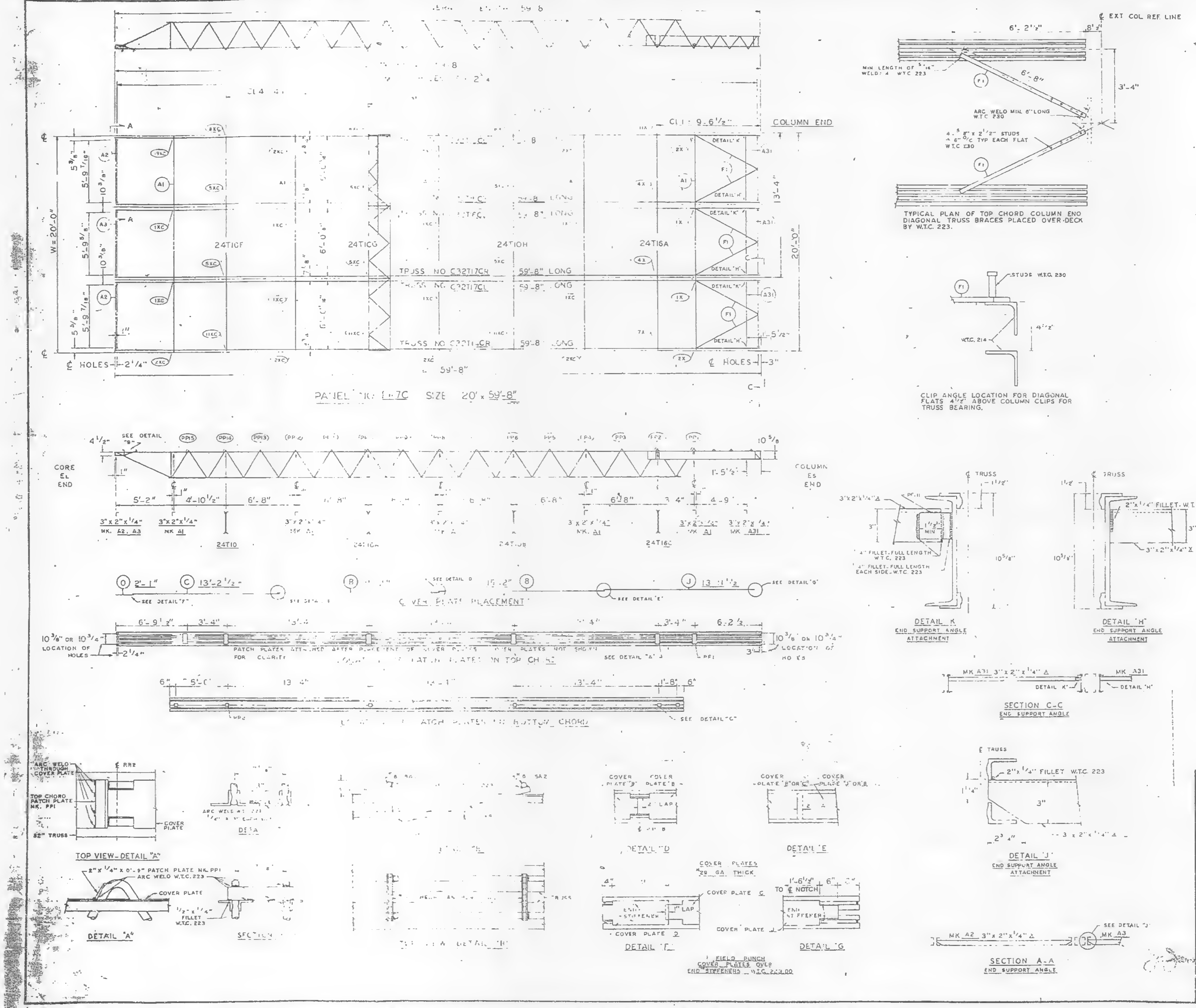
BLDG. A FLOORS 79 & 80 (NORTH)

PANEL DR5H- 20' x 58'-8"

BLDG. B FLOORS 79 & 80 (WEST)

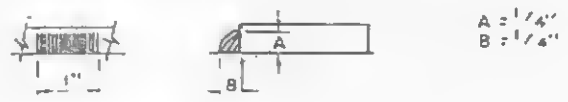
FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-72 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY FOR PONYA | DATE 7/31/69 | DRAWN BY adc<br>DATE JAN 14, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA<br>DATE JAN. 14, 1969 | IN CHARGE OF PROD DEV. |
| LACLEDE STEEL CO.<br>DETAILED BY A CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP-DR5H |


PANEL NO. E-7C SIZE 20' x 59'-8"
W = 20'-0"
24T10F
24T10G
24T10H
24T16A
TRUSS NO. C32T17CR 59'-8" LONG
TRUSS NO. C32T17CL 59'-8" LONG
COLUMN END
℄ HOLES
DETAIL "K"
DETAIL "H"
CORE EL END
COLUMN ES END
3"x 2"x 1/4" MK. A2, A3
3"x 2"x 1/4" MK A1
COVER PLATE PLACEMENT
10 3/8" OR 10 3/4" LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES
PATCH PLATES IN TOP CHORD
PATCH PLATES IN BOTTOM CHORD
℄ EXT COL REF LINE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
ARC WELD MIN. 6" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6"O/C TYP EACH FLAT W.T.C. 230
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
2"x 1/4" FILLET W.T.C. 223
SECTION C-C END SUPPORT ANGLE
MK A31 3"x 2"x 1/4" ∠
2"x 1/4" FILLET W.T.C. 223
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
MK A2 3"x 2"x 1/4" ∠
MK A3
TOP VIEW - DETAIL "A"
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
DETAIL "A"
2"x 1/4" x 0'-9" PATCH PLATE MK. PP1
ARC WELD W.T.C. 223
1/2"x 1/4" FILLET W.T.C. 223
DETAIL "D"
DETAIL "E"
COVER PLATES #29 GA. THICK.
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T14CR | 1 | C32T14CR x 59'-8" | ST 214CL |
| | T15CL | 1 | C32T15CL x 59'-8" | ST 215CL |
| | T16CL | 1 | C32T16CL x 59'-8" | ST 216CL |
| | T16CR | 1 | C32T16CR x 59'-8" | |
| | T17CL | 1 | C32T17CL x 59'-8" | ST 217CL |
| | T17CR | 1 | C32T17CR x 59'-8" | |
| BRIDGING TRUSSES | T10F | 1 | 24T10F x 19'-11" | BT 210F |
| | T10G | 1 | 24T10G x 19'-11" | BT 210G |
| | T10H | 1 | 24T10H x 19'-11" | BT 210H |
| | T16A | 1 | 24T16A x 19'-11" | BT 216A |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x 2"x 1/4"x 19'-1" | ST 403 |
| | A2 | 2 | 3"x 2"x 1/4"x 5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x 1/4"x 5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x 2"x 1/4"x 5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF1 | 3 | 3"x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135"x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135"x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135"x 13'-11 1/8" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2"x 1 1/2"x .25"x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 5 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ⌀ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ⌀ x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2"x 3/8"x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2"x 1/2"x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2"x .39"x 0'-9" | ST 401 |
| | P9 | 6 | 3"x 1/2"x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
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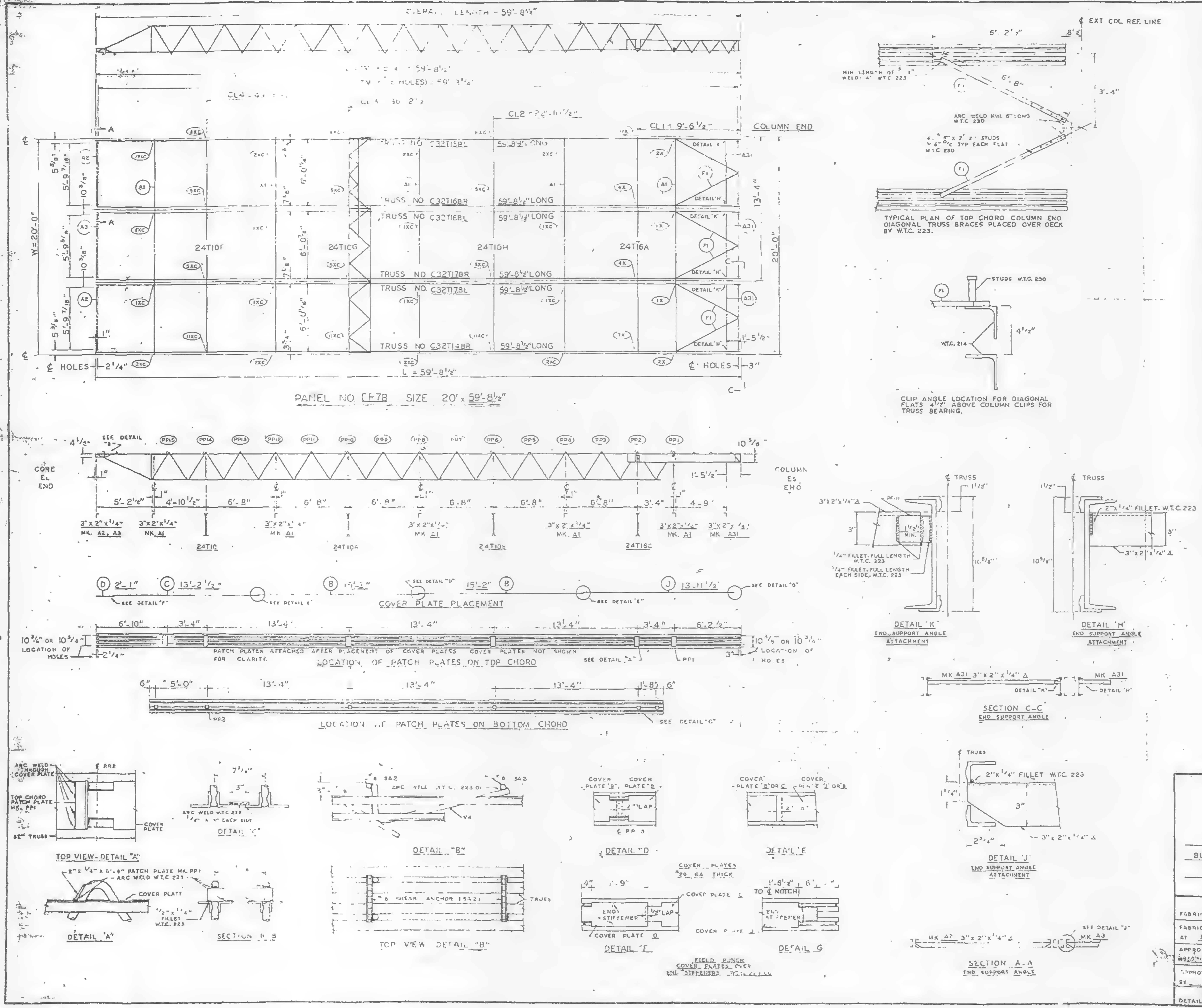
| REF DRWG. | | |
|---|---|---|
| | 7-A83-31 | 10-4-68 |
| | 7-A84-28 | 7-22-68 |
| | 7-A81-13 | 10-4-68 |
| | 7-A81-14, 15 & 16 | 10-4-68 |
| | 7-A82-13 | 10-4-68 |
| | 7-A82-17 | 10-4-68 |
| | 58-124 | 3-24-69 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

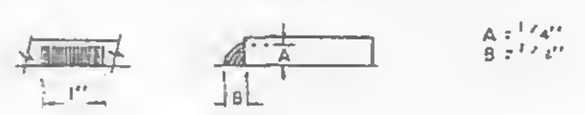
BLDG. B FLOORS 59 & 92 (EAST)
PANEL DR7C - 20' x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATE AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 6/6/69
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
DETAILED BY [illegible]
DESIGN DRAWING NO 7-A83-31
PLATE
DRAWN BY LwR
DATE MAY 8, 1969
CHECKED BY T.M. CHURA
DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
FABRICATION CONT NO W.T.C. 221
SHEET NO FP DR7C


OVERALL LENGTH - 59'-8½"
CL4 - 4
CL3 - 36'-2"
CL2 = 22'-11½"
CL1 = 9'-6½"
COLUMN END
TRUSS NO C32T15BL 59'-8½" LONG
TRUSS NO C32T16BR 59'-8½" LONG
TRUSS NO C32T16BL 59'-8½" LONG
TRUSS NO C32T17BR 59'-8½" LONG
TRUSS NO C32T17BL 59'-8½" LONG
TRUSS NO C32T14BR 59'-8½" LONG
24T10F
24T10G
24T10H
24T16A
W = 20'-0"
20'-0"
13'-4"
DETAIL "K"
DETAIL "H"
℄ HOLES 2¼"
℄ HOLES 3"
L = 59'-8½"
PANEL NO. CR7B SIZE 20' x 59'-8½"
CORE EL END
COLUMN EL END
SEE DETAIL "B"
3"x2"x¼" MK. A2, A3
3"x2"x¼" MK. A1
3"x2"x¼" MK. A31
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
10⅜" OR 10¾" LOCATION OF HOLES
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
EXT COL REF LINE
ARC WELD MIN. 6" LONG W.T.C. 230
STUDS W.T.C. 230
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
2"x¼" FILLET W.T.C. 223
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION B-B
DETAIL "C"
DETAIL "B"
TOP VIEW DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL G
COVER PLATES 20 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T14BR | 1 | C32T14BR x 59'-8½" | ST 214BL |
| | T15BL | 1 | C32T15BL x 59'-8½" | ST 215BL |
| | T16BL | 1 | C32T16BL x 59'-8 1/2" | ST 216BL |
| | T16BR | 1 | C32T16BR x 59'-8 1/2" | |
| | T17BL | 1 | C32T17BL x 59'-8 1/2" | ST 217BL |
| | T17BR | 1 | C32T17BR x 59'-8 1/2" | |
| BRIDGING TRUSSES | T10F | 1 | 24T10F x 19'-11" | BT 210F |
| | T10G | 1 | 24T10G x 19'-11" | BT 210G |
| | T10H | 1 | 24T10H x 19'-11" | BT 210H |
| | T16A | 1 | 24T16A x 19'-11" | BT 216A |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3"x 2"x ¼"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x 2"x ¼"x 5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x ¼"x 5'-11¾" | ST 403 |
| | A31 | 3 | 3"x 2"x ¼"x 5'-8⅛" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x ¼" x 0'-2⅜" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 5'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11½" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½"x .25" x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" Ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" Ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3½" x ⅜" x 0'-8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x ½" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x ¼" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
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REF. DRWG.

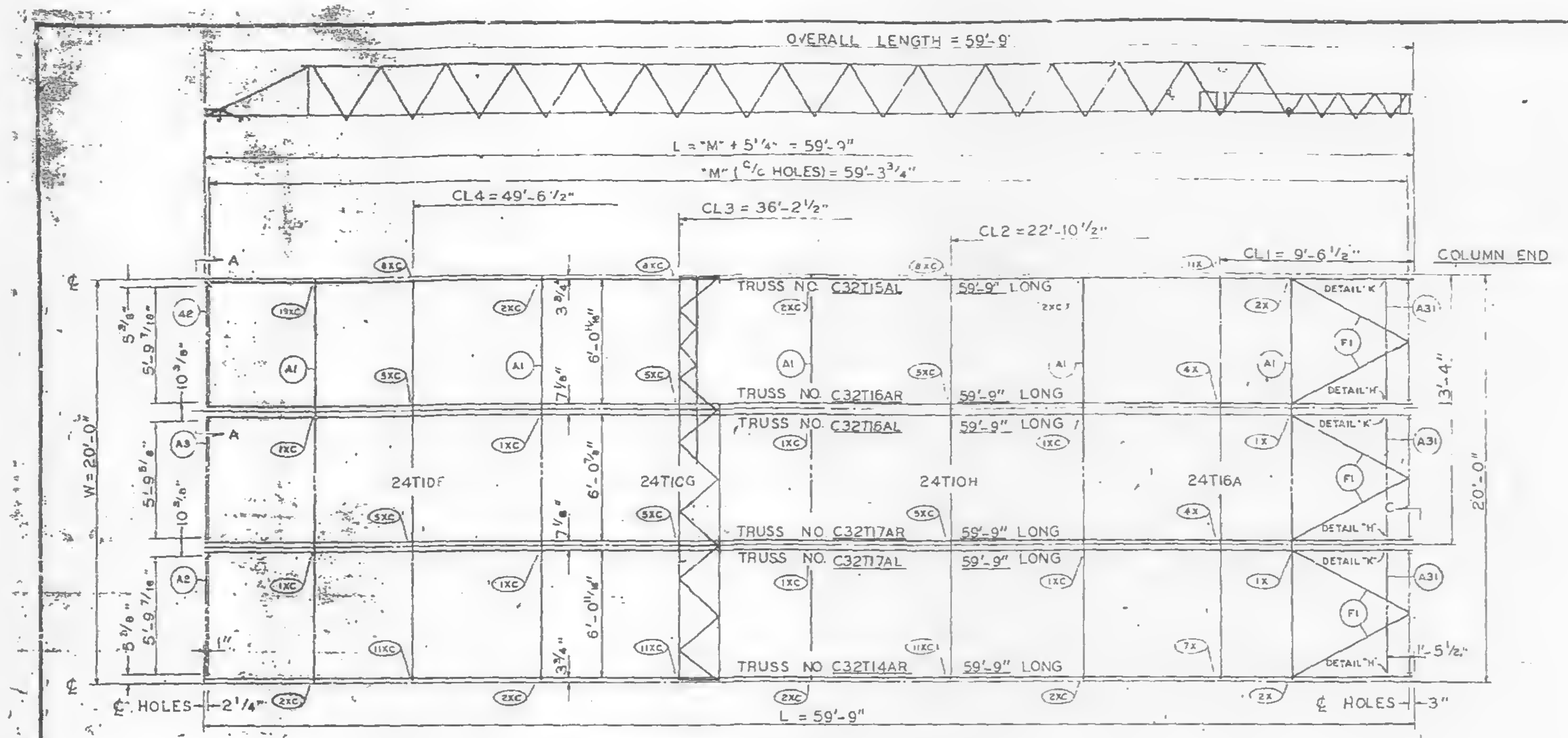
| | |
|---|---|
| 7-AB3-31 | 10-4-68 |
| 7-AB4-28 | 7-22-68 |
| 7-AB1-13 | 10-4-68 |
| 7-AB1-14, 15 & 16 | 10-4-68 |
| 7-AB2-13 | 10-4-68 |
| 7-AB2-17 | 10-4-68 |
| 58-124 | 3-24-69 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

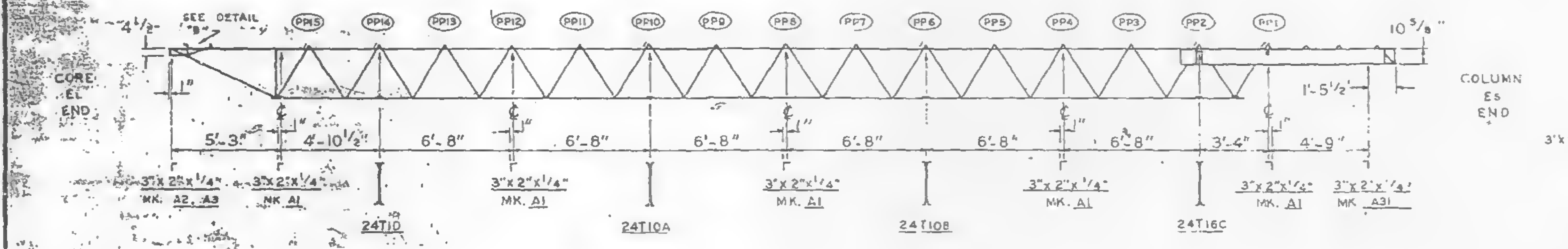
BLDG. B FLOORS 92 (WEST)

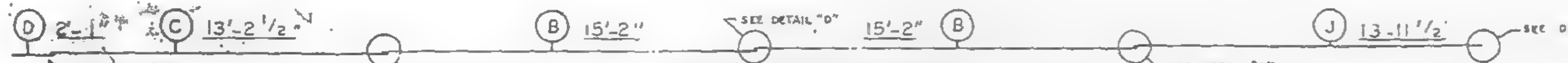
PANEL CR78 - 20' x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-31
PLATE
APPROVED FOR FABRICATION FOR P.N.Y.A. DATE 6/6/69
DRAWN BY LWR DATE MAY 6, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.N. CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP CR7B

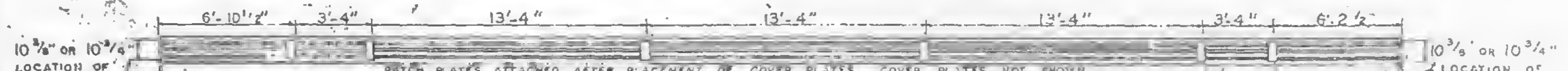


PANEL NO. DR7A SIZE 20' x 59'-9"



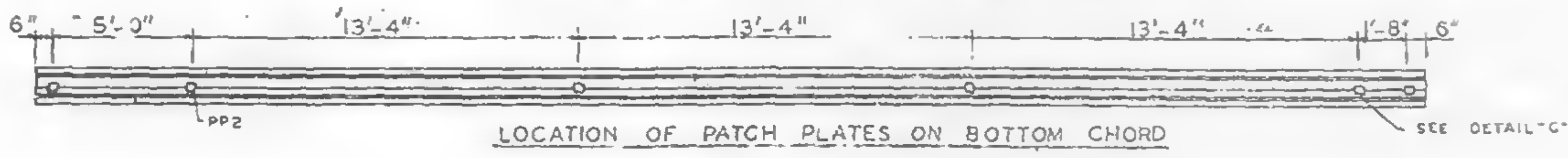


COVER PLATE PLACEMENT

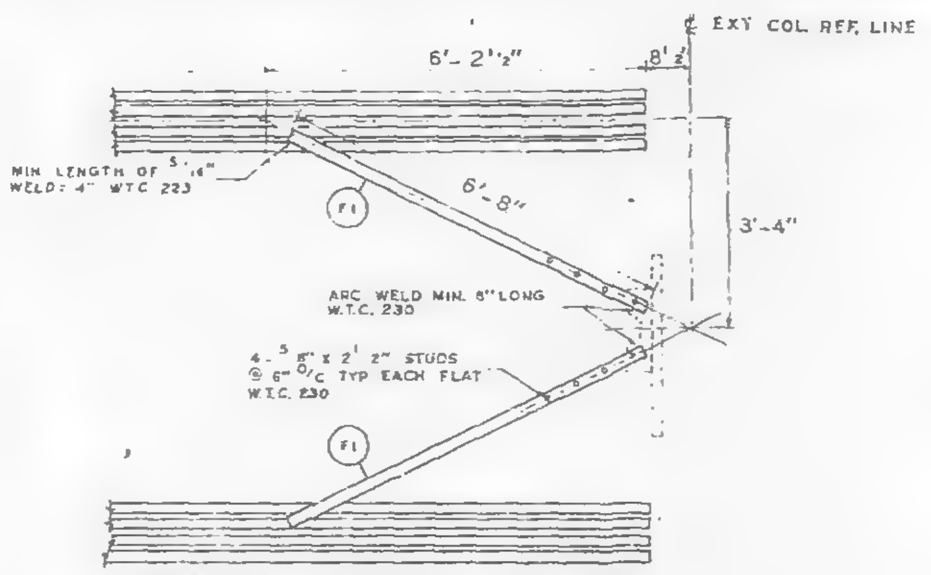


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY.

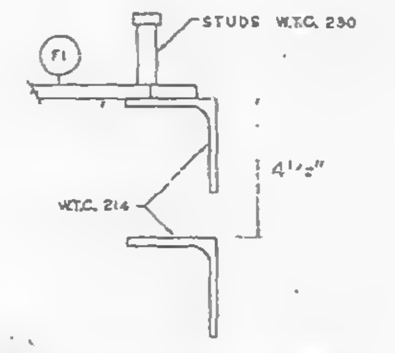
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD


℄ EXT COL REF LINE
6'-2 1/2"
8 1/2"
3'-4"
6'-8"
MIN LENGTH OF 5/16" WELD: 4" WTC 223
F1
ARC WELD MIN. 6" LONG W.T.C. 230
4-5/8" x 2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230

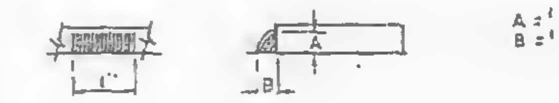
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



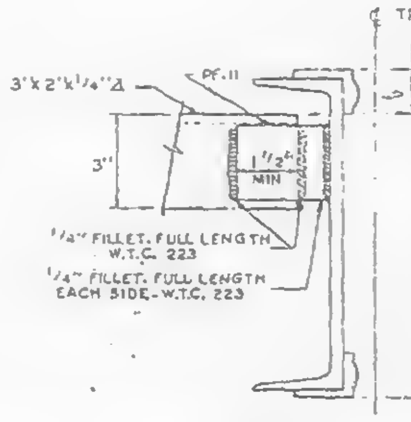
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T14AR | 1 | C32T14AR x 59'-9" | ST 214AL |
| | T15AL | 1 | C32T15AL x 59'-9" | ST 215AL |
| | T16AL | 1 | C32T16AL x 59'-9" | ST 216AL |
| | T16AR | 1 | C32T16AR x 59'-9" | |
| | T17AL | 1 | C32T17AL x 59'-9" | ST 217AL |
| | T17AR | 1 | C32T17AR x 59'-9" | |
| BRIDGING TRUSSES | T10F | 1 | 24T10F x 19'-11" | BT 210F |
| | T10G | 1 | 24T10G x 19'-11" | BT 210G |
| | T10H | 1 | 24T10H x 19'-11" | BT 210H |
| | T16A | 1 | 24T16A x 19'-11" | BT 216A |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x 2"x 1/4"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x 2"x 1/4"x 5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x 1/4"x 5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x 2"x 1/4"x 5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x .25" x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

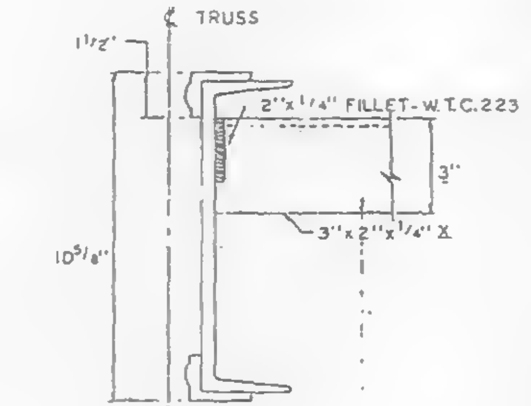
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.



A = 1/4"
B = 1/4"

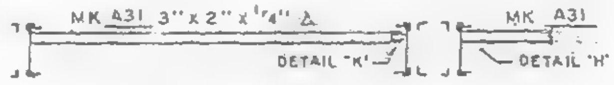

℄ TRUSS
1 1/2"
3'x2'x1/4" ∠
PF-11
3"
1 1/2" MIN
1/4" FILLET, FULL LENGTH W.T.C. 223
1/4" FILLET, FULL LENGTH EACH SIDE-W.T.C. 223
10 5/8"

DETAIL K
END SUPPORT ANGLE ATTACHMENT



DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

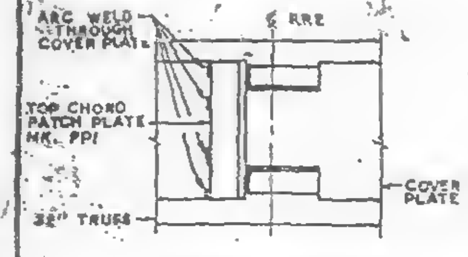
| | | | |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| NO. | DATE | REVISION | BY |



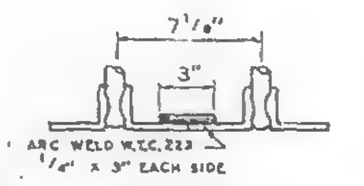
SECTION C-C
END SUPPORT ANGLE

REF DRWG.

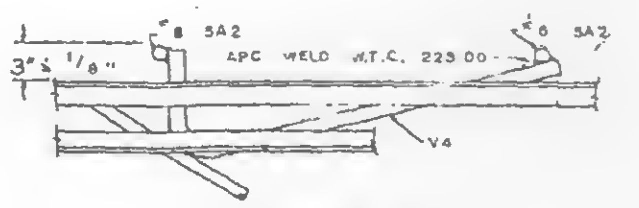
| | |
|---|---|
| 7-AB3-31 | 10-4-68 |
| 7-AB4-28 | 7-22-68 |
| 7-AB1-13 | 10-4-68 |
| 7-AB1-14, 15 & 16 | 10-4-68 |
| 7-AB2-15 | 10-4-68 |
| 7-AB2-17 | 10-4-68 |
| SB-124 | 3-24-69 |



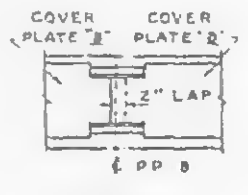
TOP VIEW - DETAIL "A"



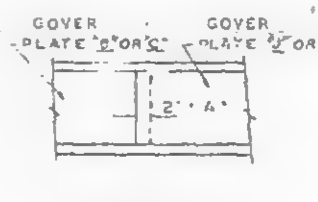
DETAIL "C"



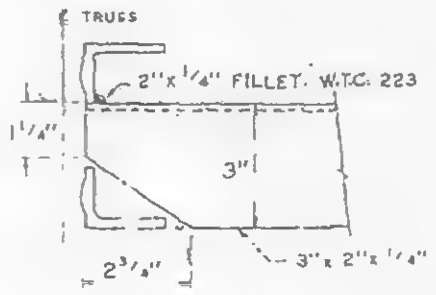
DETAIL "B"



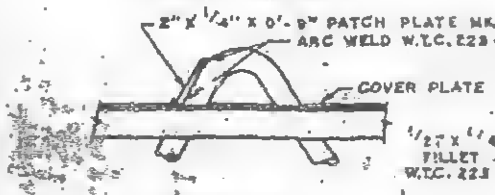
DETAIL "D"



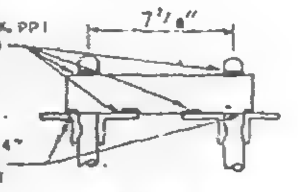
DETAIL "E"



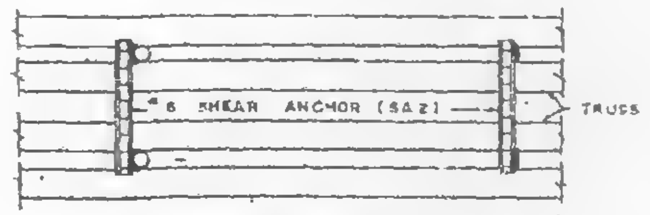
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



DETAIL "A"

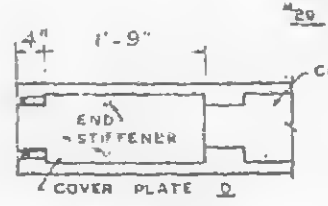


SECTION B-B

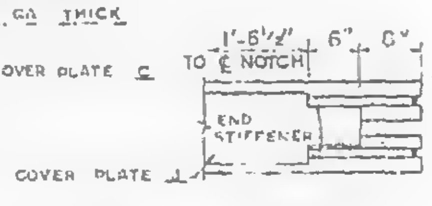


TOP VIEW DETAIL "B"

COVER PLATES
#20 GA THICK

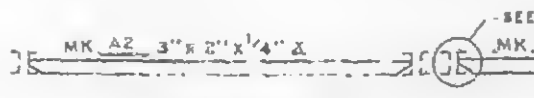


DETAIL "F"



DETAIL "G"

FIELD PUNCH
COVER PLATES OVER
END STIFFENERS W.T.C. 223.00



SECTION A-A
END SUPPORT ANGLE

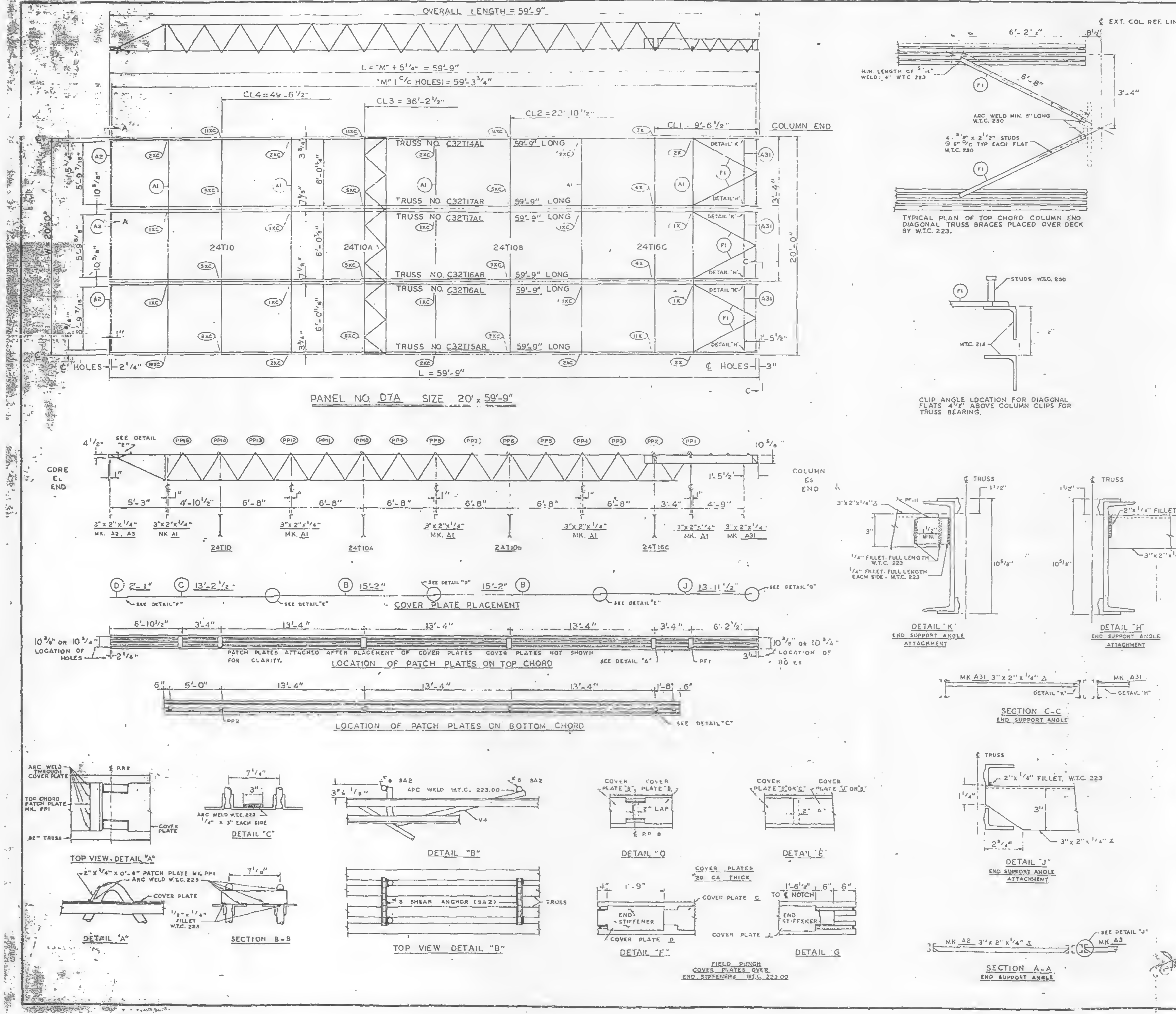
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

PANEL DR7A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

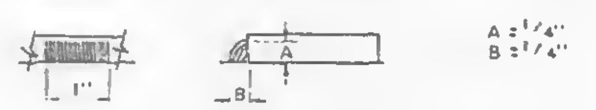
| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-AB3-31 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR PONYA | DATE 6/6/69 | DRAWN BY Luck<br>DATE MAY 8, 1969 | |
| APPROVED FOR FABRICATION BY [illegible] | DATE | CHECKED BY T.M. CHURA<br>DATE MAY 8, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. C. WEBER | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP DR7A |


OVERALL LENGTH = 59'-9"
L = "M" + 5 1/4" = 59'-9"
"M" (C/C HOLES) = 59'-3 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14AL 59'-9" LONG
TRUSS NO. C32T17AR 59'-9" LONG
TRUSS NO. C32T17AL 59'-9" LONG
TRUSS NO. C32T16AR 59'-9" LONG
TRUSS NO. C32T16AL 59'-9" LONG
TRUSS NO. C32T15AR 59'-9" LONG
24T10
24T10A
24T10B
24T16C
DETAIL "K"
DETAIL "H"
20'-0"
C HOLES
L = 59'-9"
CORE EL END
COLUMN ES END
3"x2"x1/4" MK. A2, A3
3"x2"x1/4" MK. A1
3"x2"x1/4" MK. A31
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD; 4" W.T.C. 223
ARC WELD MIN. 8" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6" C/C TYP EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET - W.T.C. 223
SECTION C-C END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES 20 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE

PANEL NO. D7A SIZE 20' x 59'-9"

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T14AL | 1 | C32T14AL x 59'-9" | ST 214AL |
| | T15AR | 1 | C32T15AR x 59'-9" | ST 215AL |
| | ~~T16AL~~ | ~~1~~ | ~~C32T16AL x 59'-9"~~ | ST 216AL |
| | ~~T16AR~~ | ~~1~~ | ~~C32T16AR x 59'-9"~~ | |
| | ~~T17AL~~ | ~~1~~ | ~~C32T17AL x 59'-9"~~ | ST 217AL |
| | ~~T17AR~~ | ~~1~~ | ~~C32T17AR x 59'-9"~~ | |
| BRIDGING TRUSSES | T10 | 1 | 24T10 x 19'-11" | BT 210 |
| | T10A | 1 | 24T10A x 19'-11" | BT 210A |
| | T10B | 1 | 24T10B x 19'-11" | BT 210B |
| | T16C | 1 | 24T16C x 19'-11" | BT 216C |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x1/4"x5'-11 3/16" | ST 403 |
| | A3 | 1 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x2"x1/4"x5'-9 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3"x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2"x 1 1/2"x .25"x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2"x 3/8"x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2"x 1/2"x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2"x .39"x 0'-9" | ST 401 |
| | P9 | 8 | 3"x 1/2"x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
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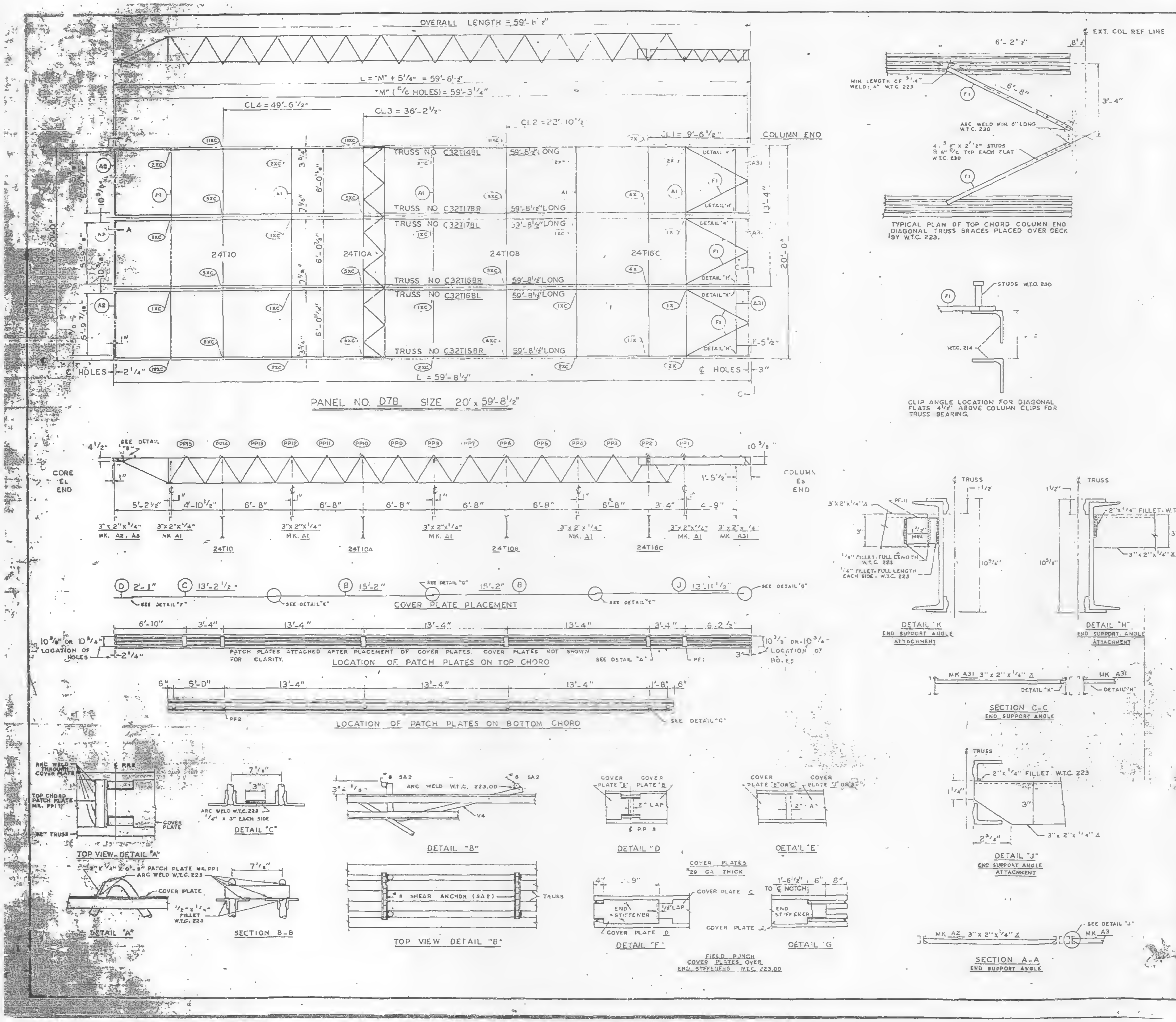
| | | | |

| REF DRWG. | | |
|---|---|---|
| | 7-A83-30 | 10-4-68 |
| | 7-A84-28 | 7-22-68 |
| | 7-A81-13 | 10-4-68 |
| | 7-A81-14, 15 & 16 | 10-4-68 |
| | 7-A82-13 | 10-4-68 |
| | 7-A82-17 | 10-4-68 |
| | 58-124 | 3-24-69 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)
PANEL D7A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-30 PLATE
APPROVED FOR FABRICATION BY FOR PONYA DATE 6/6/69
DRAWN BY LWR DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
LACLEDE STEEL CO.
CHECKED BY T.M. CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY (A.C. WEBER)
FABRICATION CONT NO W.T.C. 221
SHEET NO FP D7A


OVERALL LENGTH = 59'-8 1/2"
L = "M" + 5 1/4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-3 1/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T148L 59'-8 1/2" LONG
TRUSS NO. C32T17BR 59'-8 1/2" LONG
TRUSS NO. C32T17BL 59'-8 1/2" LONG
TRUSS NO. C32T158R 59'-8 1/2" LONG
TRUSS NO. C32T168L 59'-8 1/2" LONG
TRUSS NO. C32T158R 59'-8 1/2" LONG
24T10
24T10A
24T108
24T16C
DETAIL "K"
DETAIL "H"
20'-0"
13'-4"
℄ HOLES 2 1/4"
L = 59'-8 1/2"
℄ HOLES 3"
PANEL NO. D7B SIZE 20' x 59'-8 1/2"
CORE END
COLUMN END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES 20 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
EXT. COL. REF. LINE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T148L | 1 | C32T148L x 59'-8 1/2" | ST 2148L |
| | T158R | 1 | C32T158R x 59'-8 1/2" | ST 2158L |
| | T168L | 1 | ~~C32T168L X 59'-8-1/2"~~ | ST 2168L |
| | T168R | 1 | ~~C32T168R X 59'-8-1/2"~~ | |
| | T178L | 1 | ~~C32T178L X 59'-8-1/2"~~ | ST 2178L |
| | T178R | 1 | ~~C32T178R X 59'-8-1/2"~~ | |
| BRIDGING TRUSSES | T10 | 1 | 24T10 x 19'-11" | BT 210 |
| | T10A | 1 | 24T10A x 19'-11" | BT 210A |
| | T10B | 1 | 24T10B x 19'-11" | BT 210B |
| | T16C | 1 | 24T16C x 19'-11" | BT 216C |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 2 | 3" x 2" x 1/4" x 5'-11 9/16" | ST 403 |
| | A3 | 1 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| | A31 | 3 | 3" x 2" x 1/4" x 5'-8 1/8" | ST 410 |
| CLOSURE PLATES | PF.11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 3/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 8 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x .25" x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" Ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" Ø x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 3/4" x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
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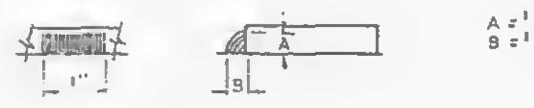


| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWG.

| | |
|---|---|
| 7-AB3-30 | 10-4-68 |
| 7-AB4-28 | 7-22-68 |
| 7-AB1-13 | 10-4-68 |
| 7-AB1-14, 15 & 16 | 10-4-68 |
| 7-AB2-13 | 10-4-68 |
| 7-AB2-17 | 10-4-68 |
| 59-124 | 3-24-69 |

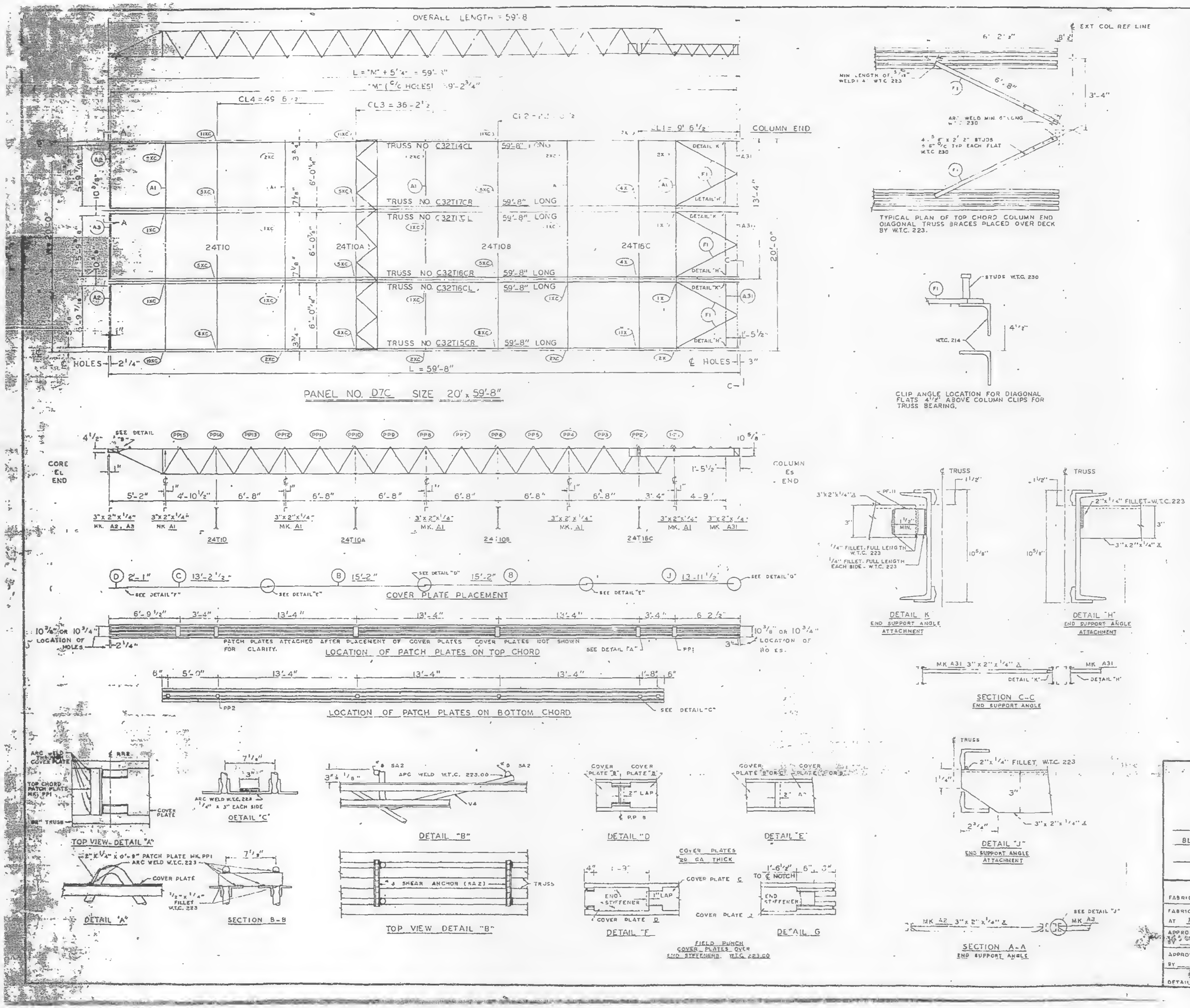
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. & FLOORS 92 (WEST)

PANEL D78. - 20' x 59'-8 1/2"

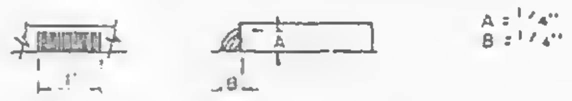
FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-AB3-30 | PLATE |
| APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. | DATE 6/6/69 | DRAWN BY | DATE MAY 8, 1969 |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA<br>DATE MAY 8, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A.C. WEBER | | FABRICATION CONT. NO W.T.C. 221 | SHEET NO FP D78 |


OVERALL LENGTH = 59'-8"
L = "M" + 5'-4" = 59'-8"
"M" (C/C HOLES) 59'-2 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
L1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14CL 59'-8" LONG
TRUSS NO. C32T17CR 59'-8" LONG
TRUSS NO. C32T17CL 59'-8" LONG
TRUSS NO. C32T16CR 59'-8" LONG
TRUSS NO. C32T16CL 59'-8" LONG
TRUSS NO. C32T15CR 59'-8" LONG
24T10
24T10A
24T10B
24T16C
DETAIL "K"
DETAIL "H"
13'-4"
20'-0"
L = 59'-8"
℄ HOLES
PANEL NO. D7C SIZE 20' x 59'-8"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
EXT COL REF LINE
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
CORE ℄ END
COLUMN ℄ END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
TOP VIEW DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL G
FIELD PUNCH COVER PLATES OVER END STIFFENERS. W.T.C. 223.00
COVER PLATES 20 GA. THICK
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T14BL | 1 | C32T14BL x 59'-8" | ST 214BL |
| | T15BR | 1 | C32T15BR x 59'-8" | ST 215BL |
| | T16BL | 1 | C32T16BL x 59'-8" | ST 216BL |
| | T16BR | 1 | C32T16BR x 59'-8" | |
| | T17BL | 1 | C32T17BL x 59'-8" | ST 217BL |
| | T17BR | 1 | C32T17BR x 59'-8" | |
| BRIDGING TRUSSES | T10 | 1 | 24T10 x 19'-11" | BT 210 |
| | T10A | 1 | 24T10A x 19'-11" | BT 210A |
| | T10B | 1 | 24T10B x 19'-11" | BT 210B |
| | T16C | 1 | 24T16C x 19'-11" | BT 216C |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x1/4"x5'-11 3/16" | ST 403 |
| | A3 | 1 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x2"x1/4"x5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF1 | 3 | 3"x1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x .25" x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ∅ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ∅ x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P8 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CO 210 THRU CO 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
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| REF DRWG. | | |
|---|---|---|
| | 7-AB3-30 | 10-4-68 |
| | 7-AB4-28 | 7-22-68 |
| | 7-AB1-13 | 10-4-68 |
| | 7-AB1-14, 15 & 16 | 10-4-68 |
| | 7-AB2-13 | 10-4-68 |
| | 7-AB2-17 | 10-4-68 |
| | SB-124 | 3-24-69 |

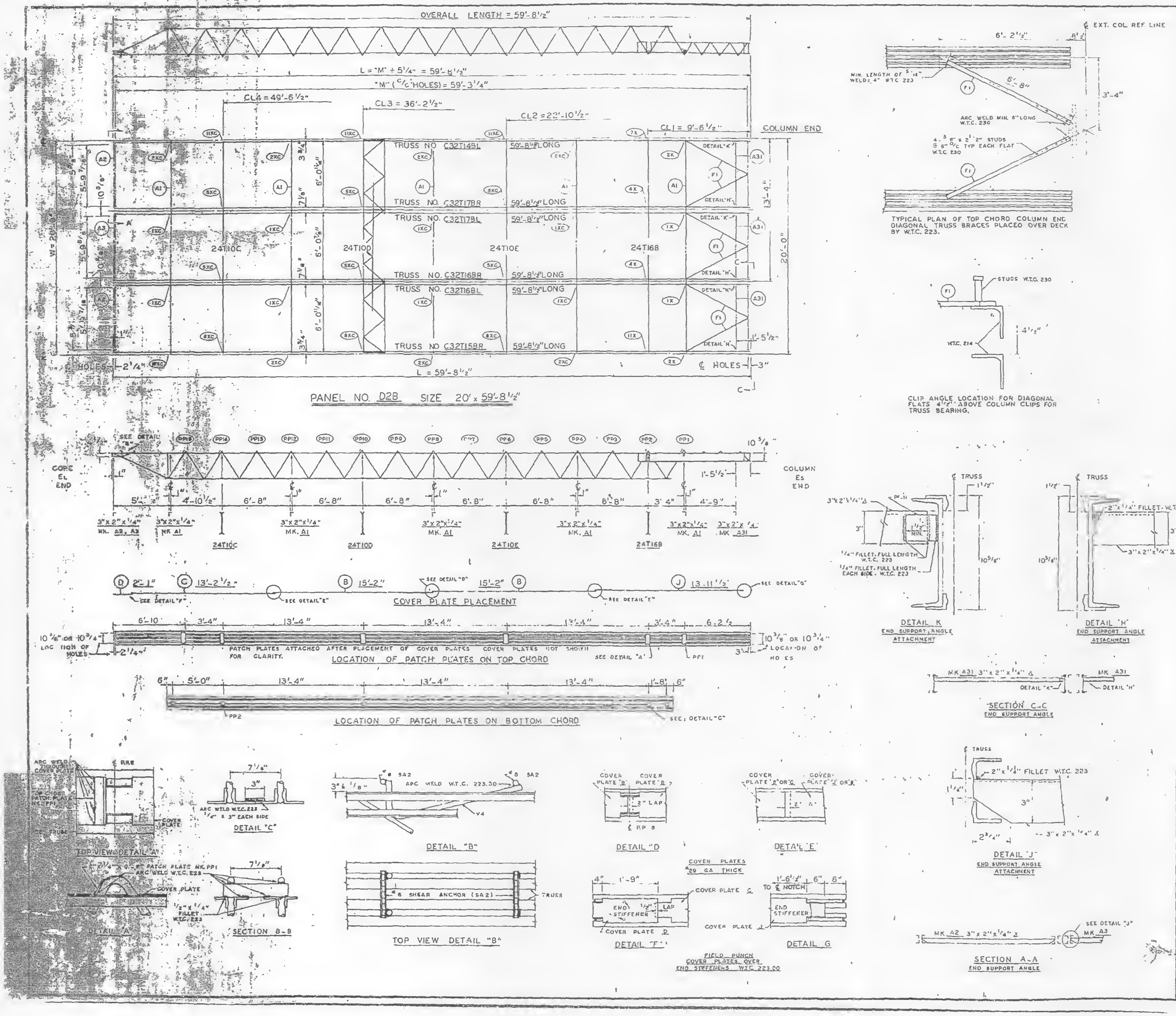
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 59 & 92 (EAST)

PANEL D7C - 20' x 59'-8"

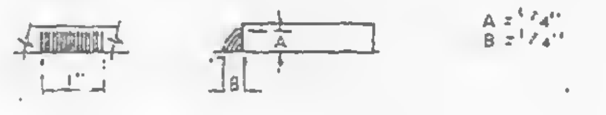
FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-AB3-30 | PLATE |
| APPROVED FOR FABRICATION BY FOR PONYA | DATE 6/6/69 | DRAWN BY LWR<br>DATE MAY 8, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA<br>DATE MAY 8, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A.C. WEBER | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP D7C |


OVERALL LENGTH = 59'-8½"
L = "M" + 5¼" = 59'-8½"
"M" (C/C HOLES) = 59'-3¼"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
COLUMN END
TRUSS NO. C32T14BL 59'-8½" LONG
TRUSS NO. C32T17BR 59'-8½" LONG
TRUSS NO. C32T17BL 59'-8½" LONG
TRUSS NO. C32T16BR 59'-8½" LONG
TRUSS NO. C32T16BL 59'-8½" LONG
TRUSS NO. C32T15BR 59'-8½" LONG
24T10C
24T10D
24T10E
24T16B
DETAIL "K"
DETAIL "H"
W = 20'-0"
20'-0"
¢ HOLES
L = 59'-8½"
PANEL NO. D2B SIZE 20' x 59'-8½"
CORE EL END
COLUMN ES END
3"x2"x¼" MK. A2, A3
3"x2"x¼" MK. A1
3"x2"x¼" MK. A31
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
ARC WELD MIN. 6" LONG W.T.C. 230
4 - 5/8" x 2½" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL K END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
¼" FILLET-FULL LENGTH W.T.C. 223
¼" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
2"x¼" FILLET-W.T.C. 223
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
2"x¼" FILLET W.T.C. 223
SECTION A-A END SUPPORT ANGLE
DETAIL "C"
ARC WELD W.T.C. 223 ¼" x 3" EACH SIDE
DETAIL "B"
ARC WELD W.T.C. 223,30
#8 SA2
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL G
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION B-B
PATCH PLATE MK. PP1 ARC WELD W.T.C. 223
COVER PLATE
END STIFFENER

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T14BL | 1 | C32T14BL x 59'-8½" | ST 214BL |
| | T15BR | 1 | C32T15BR x 59'-8½" | ST 215BL |
| | ~~T16BL~~ | ~~1~~ | ~~C32T16BL X 59'-8-1/2"~~ | ST 216BL |
| | ~~T16BR~~ | ~~1~~ | ~~C32T16BR X 59'-8-1/2"~~ | |
| | ~~T17BL~~ | ~~1~~ | ~~C32T17BL X 59'-8-1/2"~~ | ST 217BL |
| | ~~T17BR~~ | ~~1~~ | ~~C32T17BR X 59'-8-1/2"~~ | |
| BRIDGING TRUSSES | T10C | 1 | 24T10C x 19'-11" | BT 210C |
| | T10D | 1 | 24T10D x 19'-11" | BT 210D |
| | T10E | 1 | 24T10E x 19'-11" | BT 210E |
| | T16B | 1 | 24T16B x 19'-11" | BT 216B |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3"x2"x¼"x19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x¼"x5'-11⁹⁄₁₆" | ST 403 |
| | A3 | 1 | 3"x2"x¼"x5'-11¾" | ST 403 |
| | A31 | 3 | 3"x2"x¼"x5'-8⅛" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PC11 | 3 | 3" x ¼" x 0'-2⅜" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11½" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x .25" x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" Ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" Ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3½" x ⅜" x 0'-6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x ½" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CO 210 THRU CO 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FULL THROAT FILLET.



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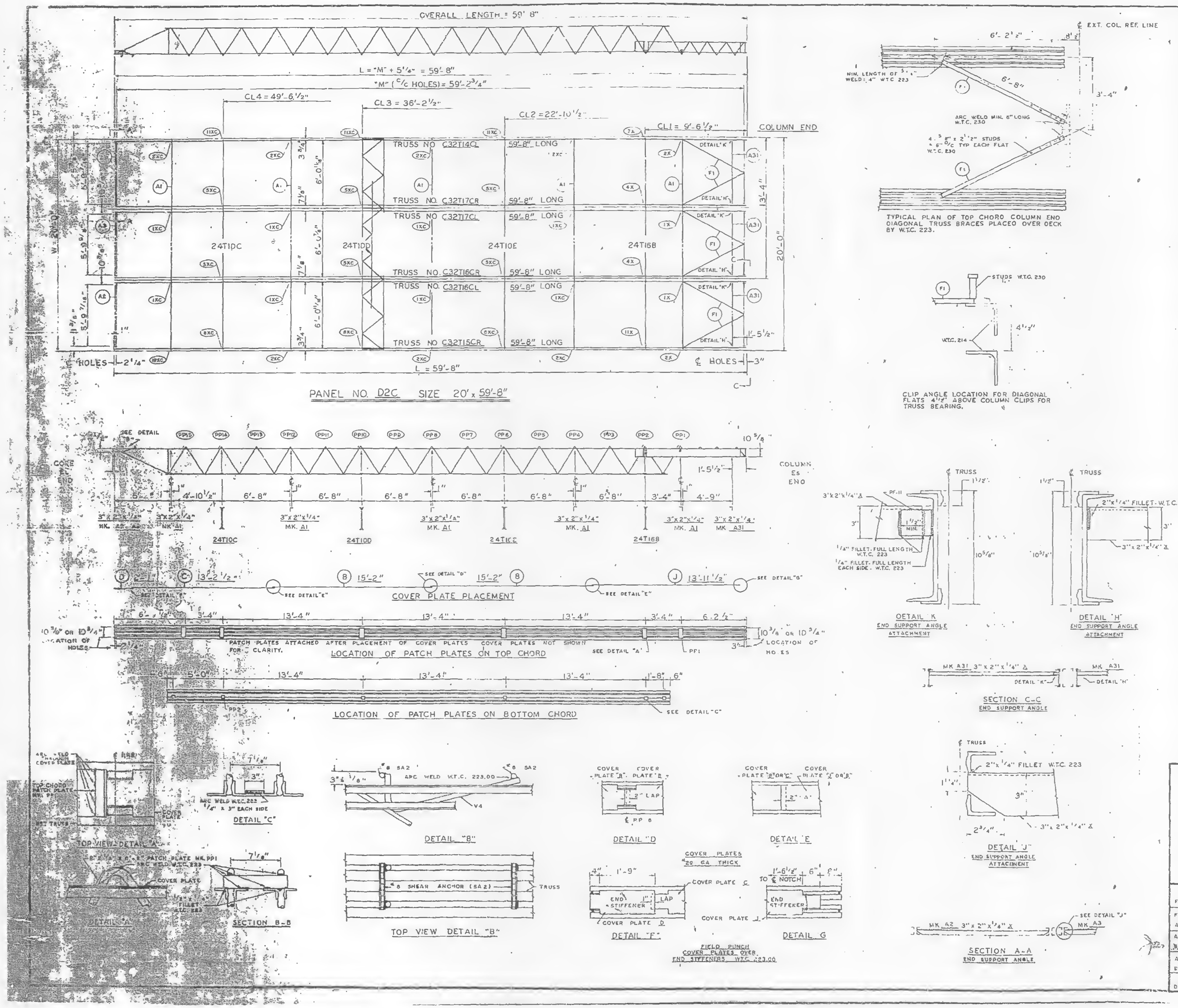
| REF. DRWG. | | |
|---|---|---|
| | 7-A83-30 | 10-4-68 |
| | 7-A84-28 | 7-22-68 |
| | 7-A81-13 | 10-4-68 |
| | 7-A81-14, 15 & 16 | 10-4-68 |
| | 7-A82-13 | 10-4-68 |
| | 7-A82-17 | 10-4-68 |
| | SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

PANEL D2B - 20' x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-30
PLATE
APPROVED FOR FABRICATION BY FOR PONYA DATE 6/6/69
DRAWN BY LWR DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY A.C. WEBL
FABRICATION CONT NO W.T.C. 221
SHEET NO FP D2B



| REQUIRED MATERIAL: PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T14CL | 1 | C32T14CL x 59'-8" | ST 214CL |
| | T15CR | 1 | C32T15CR x 59'-8" | ST 215CL |
| | T16CL | 1 | C32T16CL x 59'-8" | ST 216CL |
| | T16CR | 1 | C32T16CR x 59'-8" | |
| | T17CL | 1 | C32T17CL x 59'-8" | ST 217CL |
| | T17CR | 1 | C32T17CR x 59'-8" | |
| BRIDGING TRUSSES | T10C | 1 | 24T10C x 19'-11" | BT 210C |
| | T10D | 1 | 24T10D x 19'-11" | BT 210D |
| | T10E | 1 | 24T10E x 19'-11" | BT 210E |
| | T16B | 1 | 24T16B x 19'-11" | BT 216B |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 2 | 3"x 2"x1/4"x5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x1/4"x 5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x 2"x1/4"x5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2"x .25"x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" Ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" Ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 3/8"x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2"x .39"x 0'-9" | ST 401 |
| | P9 | 6 | 3"x 1/2"x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

| | | | |
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| REF. DRWG. | | |
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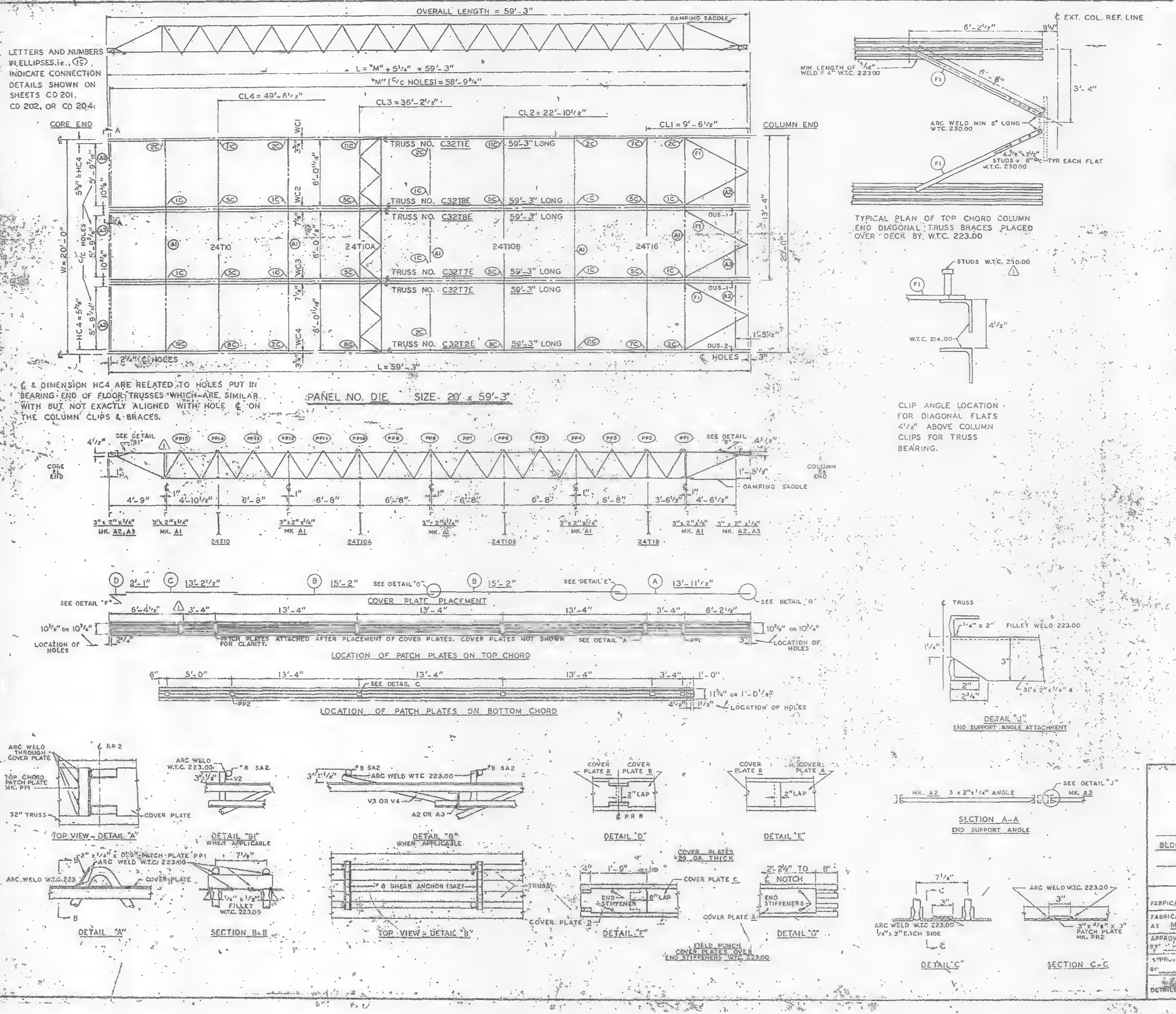
| | 7-AB3-30 | 10-4-68 |
| | 7-AB4-28 | 7-22-68 |
| | 7-AB1-13 | 10-4-68 |
| | 7-AB1-14, 15 & 16 | 10-4-68 |
| | 7-AB2-13 | 10-4-68 |
| | 7-AB2-17 | 10-4-68 |
| | SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & [illegible] (SOUTH)
PANEL D2C - 20' x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-30 PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 6/6/69
DRAWN BY [illegible] DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP D2C


LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.
OVERALL LENGTH = 59'-3"
DAMPING SADDLE
L = "M" + 5¼" = 59'-3"
"M" (C/C HOLES) = 58'-9¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T1E 59'-3" LONG
TRUSS NO. C32T8E 59'-3" LONG
TRUSS NO. C32T8E 59'-3" LONG
TRUSS NO. C32T7E 59'-3" LONG
TRUSS NO. C32T7E 59'-3" LONG
TRUSS NO. C32T2E 59'-3" LONG
24T10
24T10A
24T10B
24T16
W = 20'-0"
HC4 = 5⅜"
C/C HOLES
2¼" ℄ HOLES
℄ HOLES
L = 59'-3"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIE SIZE 20' x 59'-3"
SEE DETAIL "B1"
SEE DETAIL "B"
CORE ℄ END
COLUMN ℄ END
DAMPING SADDLE
3"x2"x¼" MK. A2, A3
3"x2"x¼" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
COVER PLATES 29 GA. THICK
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
FILLET WELD 223.00
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
MK. A2 3 x 2"x¼" ANGLE
SEE DETAIL "J" MK. A3
SECTION A-A END SUPPORT ANGLE
ARC WELD W.T.C. 223.00
DETAIL "C"
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1E | 1 | C32T1E - 59'-3" | ST 201E |
| | T2E | 1 | C32T2E - 59'-3" | ST 202E |
| | T7E | 2 | C32T7E - 59'-3" | ST 207E |
| | T8E | 2 | C32T8E - 59'-3" | ST 208E |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3"x 2"x¼" ANGLE | A1 | 5 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼" x 5'-11⅜" | ST 403 |
| | A3 | 2 | 3"x 2"x¼" x 5'-11⅜" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2"x 1½" x¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-2 | 1 | 3½"x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1 - 3" | ST 400 |
| | CB4 | 8 | 1" ϕ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 8-9-69 | AS NOTED | G.D.C. |

REF. DRWGS.

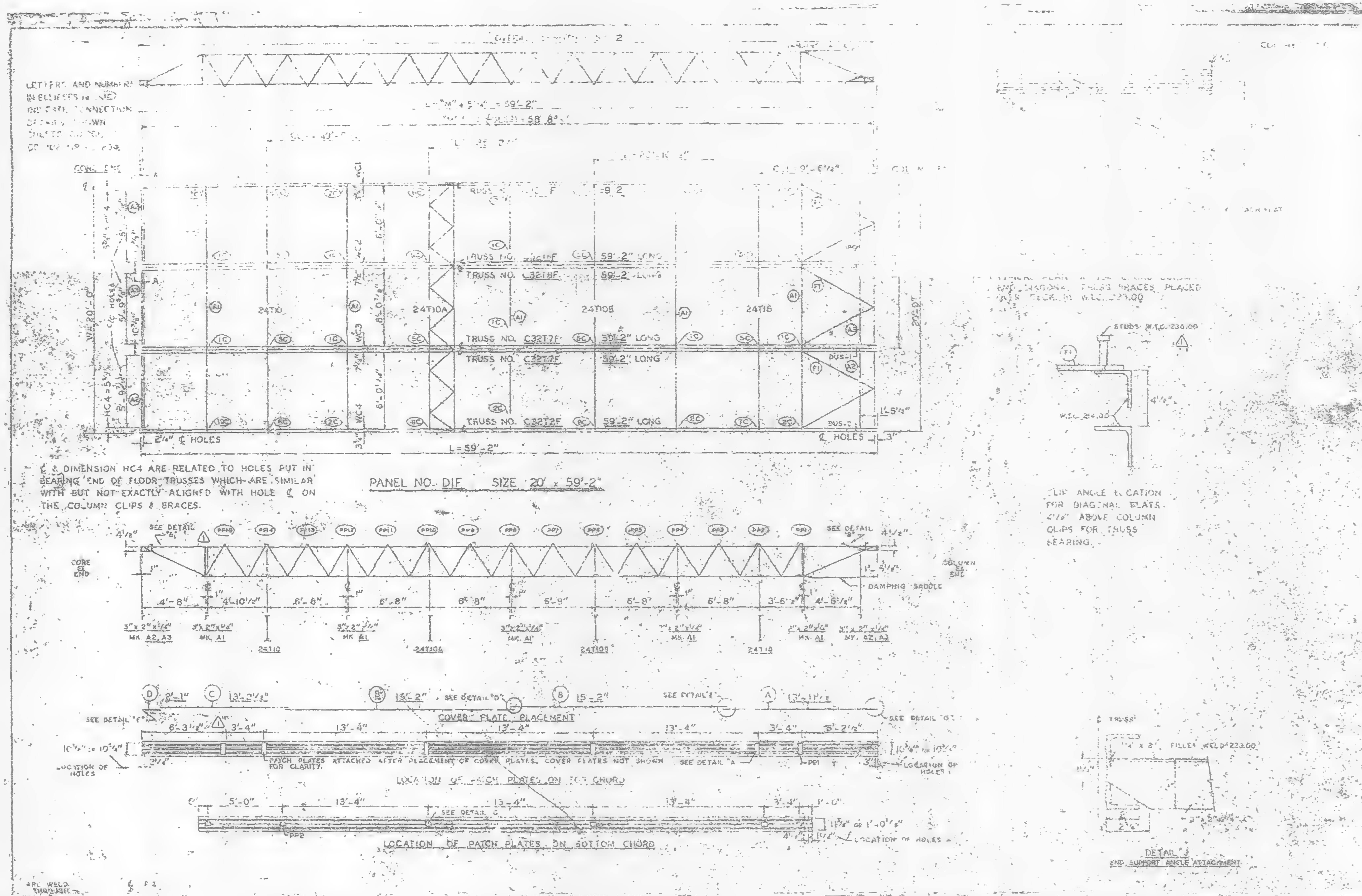
| | |
|---|---|
| 7-A82-5 & 11 | 7-22-68 |
| 7-A83-9 | 10-15-68 |
| 7-A84-3,1 | 1-3-68 |
| 7-A84-15 & 10,39 | 7-22-68 |
| 7-A84-3 & 42 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-A81-2,3 & 4 | 7-22-68 |
| 7-A81-3,4 & 5 | 10-15-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
PANEL DIE - 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-9 4-15-68 | PLATE |
| APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. | DATE | DRAWN BY: G.D.C. DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA DATE JULY 22, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DIE |


LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN

TRUSS NO. C32T1F 59'-2" LONG
TRUSS NO. C32T8F 59'-2" LONG
TRUSS NO. C32T7F 59'-2" LONG
TRUSS NO. C32T7F 59'-2" LONG
TRUSS NO. C32T2F 59'-2" LONG

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. DIF SIZE 20' x 59'-2"

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD

CLIP ANGLE LOCATION FOR DIAGONAL PLATES 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

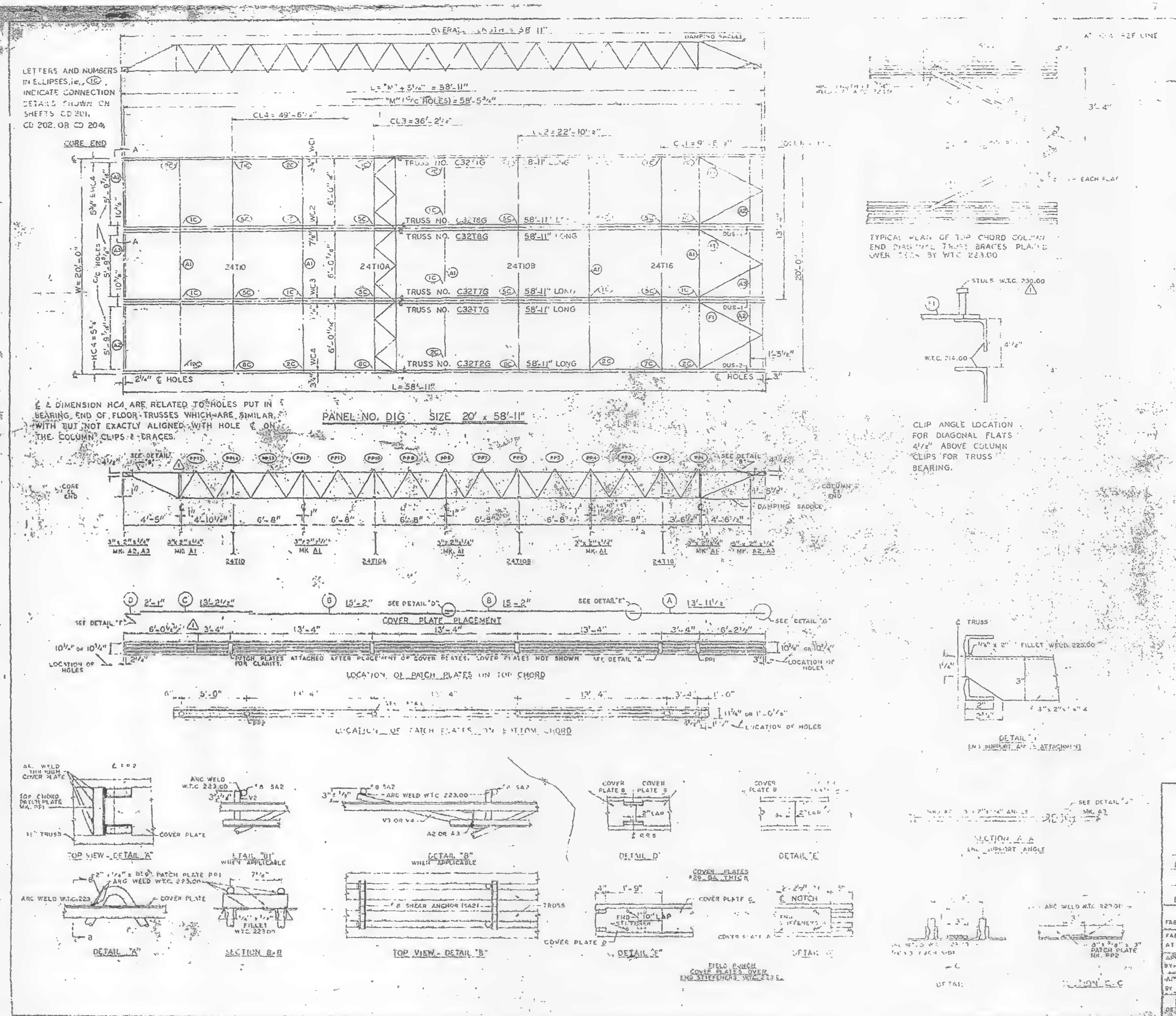
| [illegible] MATERIAL FOR PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| [illegible] | F | 1 | C32T1F 59'-2" | ST 201F |
| | 2F | 1 | C32T2F 59'-2" | ST 202F |
| | 7F | 2 | C32T7F - 59'-2" | ST 207F |
| | 8F | 2 | C32T8F - 59'-2" | ST 208F |
| [illegible] | 10 | 1 | 24T10 [illegible] | ST 210 |
| | 10A | 1 | 24T10A [illegible] | ST 210A |
| | 10B | 1 | 24T10B [illegible] | ST 210B |
| | 16 | 1 | 24T16 [illegible] | ST 216 |
| [illegible] ANGLE | [illegible] | 5 | 3" x 2" x 1/4" x [illegible] | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-1 7/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-[illegible] | ST 403 |
| [illegible] | [illegible] | 6 | 1 1/2" x [illegible] x 6'-8" | ST 402 |
| [illegible] PLATES | [illegible] | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | [illegible] | 9 | 3" x 3/8" x 0'-3" | ST 400 |
| [illegible] | [illegible] | [illegible] | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| ANGLE CLIPS | C1 | 24 | 3" x 1/2" x 1/4" x 0'-8" | ST 300 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 0'-9" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x [illegible] x 3'-8 3/4" | ST 298 |
| | DUS-2 | 1 | [illegible] | ST 298 |
| CONNECTION BAR | CB1 | 4 | 1" ɸ x 1'-8" [illegible] | ST 400 |
| | CB4 | 5 | 1" ɸ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/4" x 0'-1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x .30" x 1'-0" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .32" x 0'-4" | ST 60T |

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-10-69 | AS NOTED | G.D.C. |

1 REF. DRWGS. -
7-A82-5 & 11 — 7-22-68
7-A83-9 — 10-15-68
7-A84-[illegible] — [illegible]-3-68
7-A84-15, 18 & 39 — 7-22-68
7-A84-42 & 3 — 10-15-68
ST-124 — 1-6-69
7-A81-2, 3 & 4 — 7-22-68



| REQUIRED MATERIAL FOR PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T1G | 1 | C32T1G - 58'-11" | ST 201G |
| | T2G | 1 | C32T2G - 58'-11" | ST 202G |
| | T7G | 2 | C32T7G - 58'-11" | ST 207G |
| | T8G | 2 | C32T8G - 58'-11" | ST 208G |
| BRIDGING TRUSSES | T10 | 1 | 24T10 - 19'-11" | BT 210 |
| | T10A | 1 | 24T10A - 19'-11" | BT 210A |
| | T10B | 1 | 24T10B - 19'-11" | BT 210B |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| [illegible] ANGLE | A1 | 5 | 3" x 2" x ¼" x 19'-1" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅜" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| [illegible] FLATS | F1 | 6 | 1½" x ⅝" x 8'-8" | ST 402 |
| [illegible] PLATES | FF1 | 18 | 2" x [illegible] x 0'-9" | ST 400 |
| | FF2 | 8 | [illegible] x 0'-3" | ST 400 |
| COVER PLATES | A | 1 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2½" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-[illegible] | ST 303 |
| ANGLE CLIPS | C1 | 24 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 9 | #8 REBAR x 3'-9" | ST 400 |
| DAMPING SADDLE | DS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 208 |
| | DS-2 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 208 |
| CONNECTION BAR | CS1 | 4 | 1" ⌀ x 1'-3" | ST 404 |
| | CS2 | 6 | 1" ⌀ x 0'-10" | ST 400 |
| CONNECTION PLATES | P1 | 1 | [illegible] | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x [illegible] | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ½" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

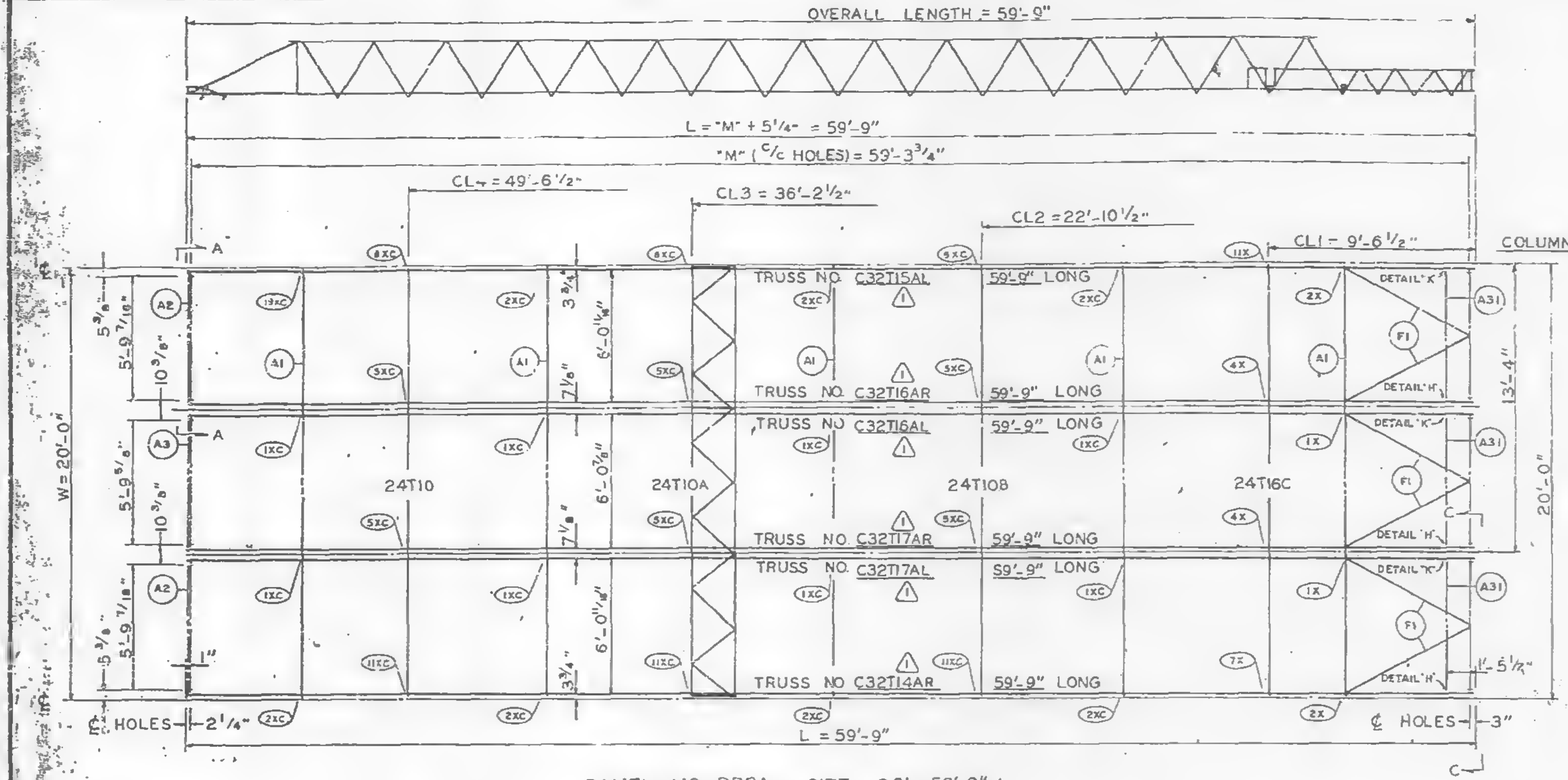
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| ⚠1 | 6-10-69 | AS NOTED | GDC. |

⚠1 P.A. DRWGS.
7-AB8-5 & 11 — 7-22-68
7-AB3-9 — 10-15-68
7-AB4-[illegible] — 1-[illegible]-69
7-AB4-15, [illegible] & 39 — 7-22-68
7-AB4-47 & 3 — 10-15-68
[illegible]-124 — 1-6-69
7-AB1-2, 3 & 4 — 7-22-68
7-AB1-5 — 10-15-68

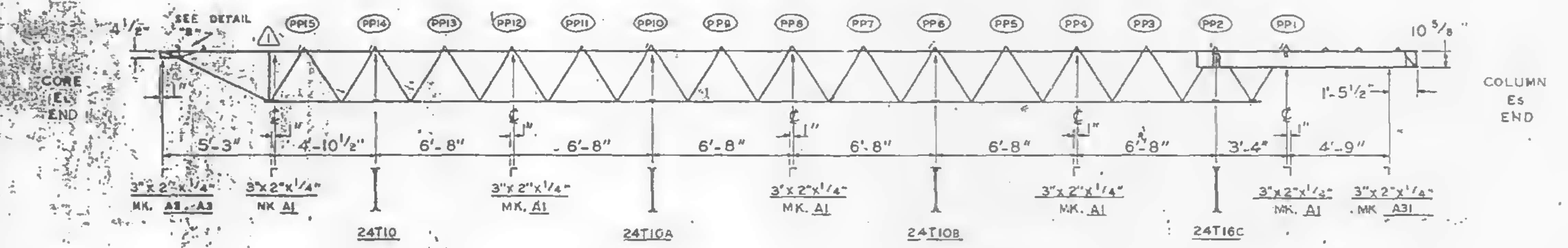
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

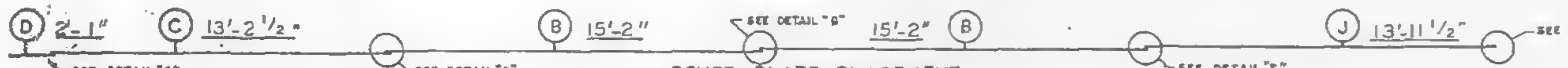
BLDG. A FLOORS 39-40 (N&S)
PANEL D1G - 20' x 58'-11"
BLDG. B FLOORS 39-40 (EAST & WEST) ⚠1

| | | | |
|---|---|---|---|
| FABRICATION BY [illegible] STEEL COMPANY | | | |
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-9 | PLATE [illegible] |
| APPROVED FOR FABRICATION BY [illegible] FOR PNY.N.Y.A. | DATE 1/2/70 | DRAWN BY [illegible] DATE OCT. 24, 1968 | |
| APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR | DATE | CHECKED BY: [illegible]CHURA DATE OCT. 24, 1968 | IN CHARGE OF PROD. [illegible] |
| DETAILED BY [illegible] | | FABRICATION CONT. NO. W.T.C. [illegible] 22[illegible] | SHEET NO. FP-D1G |

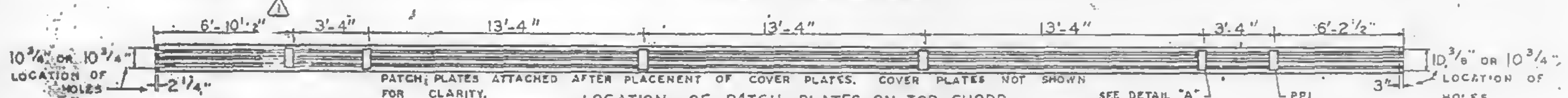

OVERALL LENGTH = 59'-9"
L = "M" + 5 1/4" = 59'-9"
"M" (C/C HOLES) = 59'-3 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T15AL 59'-9" LONG
TRUSS NO. C32T16AR 59'-9" LONG
TRUSS NO. C32T16AL 59'-9" LONG
TRUSS NO. C32T17AR 59'-9" LONG
TRUSS NO. C32T17AL 59'-9" LONG
TRUSS NO. C32T14AR 59'-9" LONG
24T10
24T10A
24T10B
24T16C
W = 20'-0"
20'-0"
13'-4"
DETAIL "K"
DETAIL "H"
A1
A2
A3
A31
F1
℄ HOLES 2 1/4"
℄ HOLES 3"
L = 59'-9"
1'-5 1/4"

PANEL NO. DR2A SIZE 20' x 59'-9"



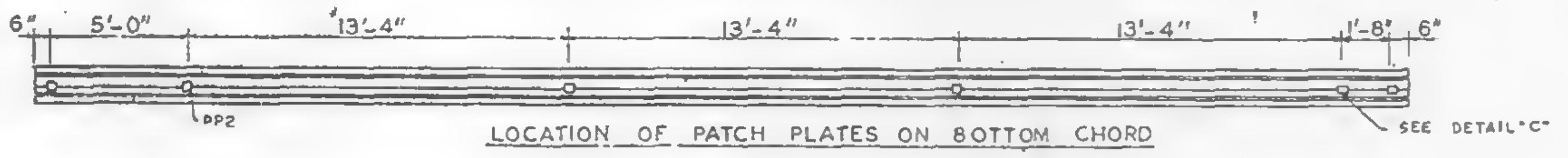


COVER PLATE PLACEMENT

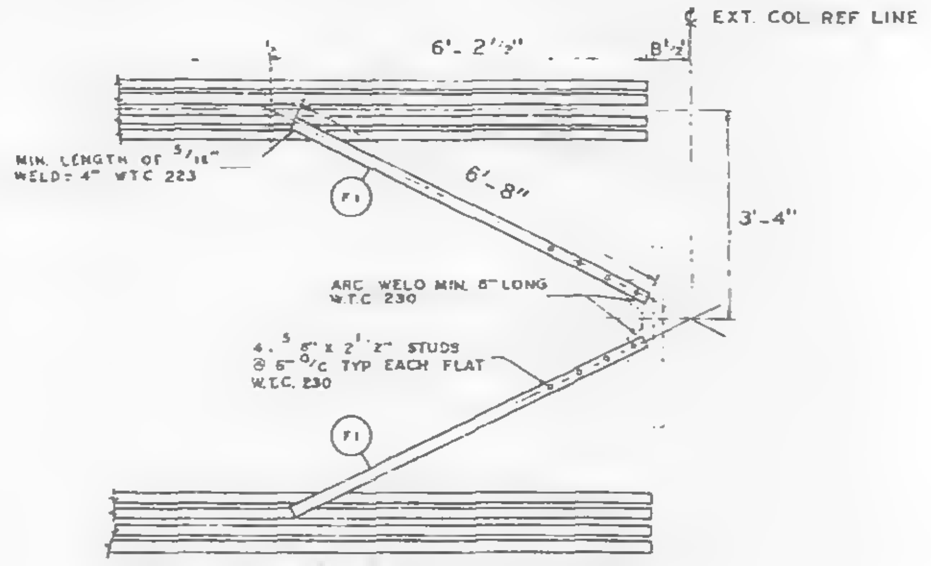

6'-10 1/2"
3'-4"
13'-4"
6'-2 1/2"
10 3/4" OR 10 3/4" LOCATION OF HOLES
2 1/4"
10 3/8" OR 10 3/4" LOCATION OF HOLES
3"
SEE DETAIL "A"
PP1

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

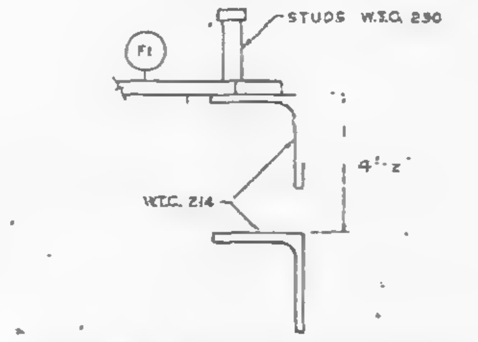
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD


℄ EXT COL REF LINE
6'-2 1/2"
8 1/2"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
ARC WELD MIN. 6" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6" C/C TYP EACH FLAT W.T.C. 230
F1

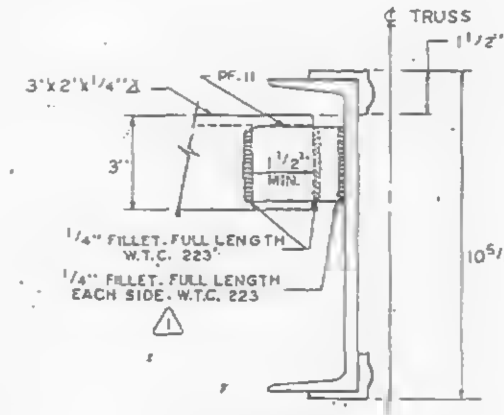
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



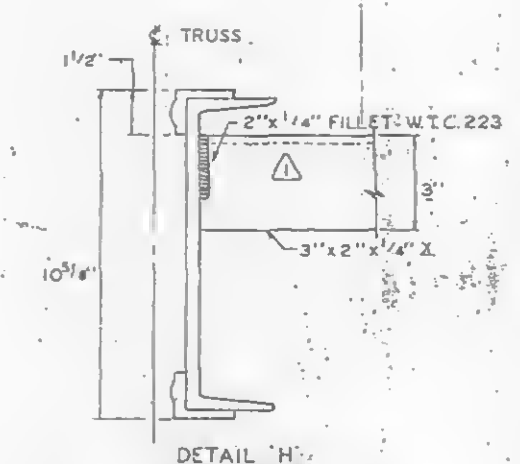
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES ⚠1 | T14AR | 1 | C32T14AR x 59'-9" | ST 214AL |
| | T15AL | 1 | C32T15AL x 59'-9" | ST 215AL |
| | T16AL | 1 | C32T16AL x 59'-9" | ST 216AL |
| | T16AR | 1 | C32T16AR x 59'-9" | |
| | T17AL | 1 | C32T17AL x 59'-9" | ST 217AL |
| | T17AR | 1 | C32T17AR x 59'-9" | |
| BRIDGING TRUSSES | T10 | 1 | 24T10 x 19'-11" | BT 210C |
| | T10A | 1 | 24T10A x 19'-11" | BT 2100 |
| | T10B | 1 | 24T10B x 19'-11" | BT 210E |
| | T16C | 1 | 24T16C x 19'-11" | BT 216B |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x1/4"x5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x2"x1/4"x5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3"x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/16" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2"x 1 1/2"x .25"x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 5 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 5/8" x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

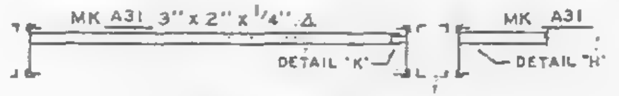
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.


℄ TRUSS
1 1/2"
3"x2"x1/4" ∠
PF-11
1 1/2" MIN.
3"
1/4" FILLET, FULL LENGTH W.T.C. 223
1/4" FILLET, FULL LENGTH EACH SIDE, W.T.C. 223
10 5/8"

DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



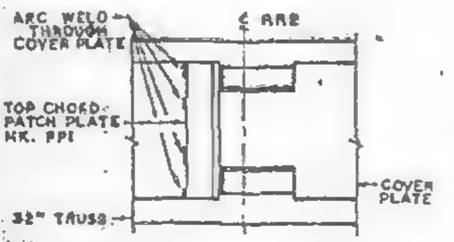
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



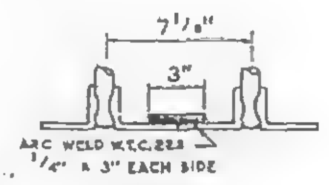
SECTION C-C
END SUPPORT ANGLE

| | | | |
|---|---|---|---|
| | | | |
| | | | |
| ⚠2 | 5-12-69 | REF. DRWG. | G.O.C |
| ⚠1 | 2-4-69 | AS NOTED | G.O.C |
| NO. | DATE | REVISION | BY |

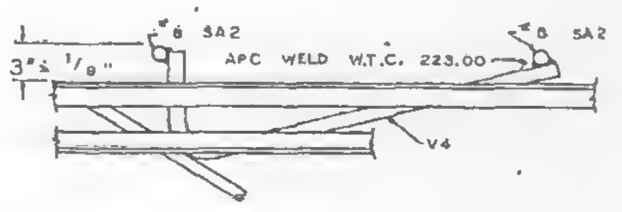
| REF DRWG. | | |
|---|---|---|
| | 7-A83-31 | 10-4-68 |
| | 7-A84-28 | 7-22-68 |
| | 7-A81-13 | 10-4-68 |
| | 7-A81-14, 15 & 16 | 10-4-68 |
| ⚠2 | 7-A82-5 | 7-22-68 |
| | 7-A82-17 | 10-4-68 |
| | SA-124 | 10-11-68 |



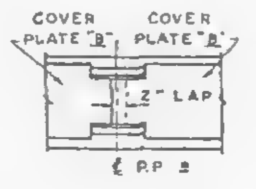
TOP VIEW - DETAIL "A"



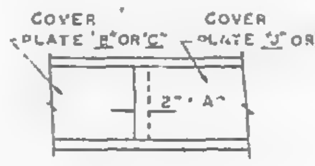
DETAIL "C"



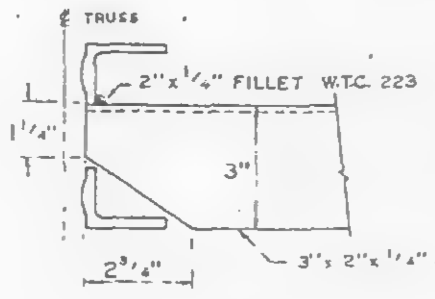
DETAIL "B"



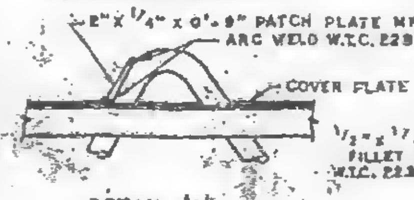
DETAIL "D"



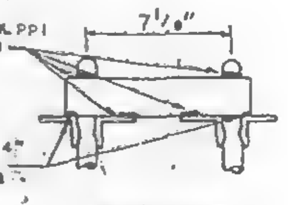
DETAIL "E"



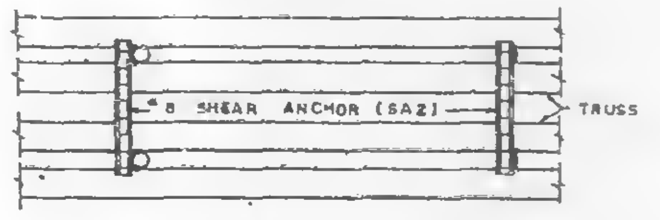
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



DETAIL "A"

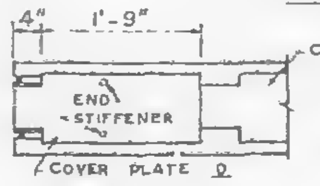


SECTION B-B



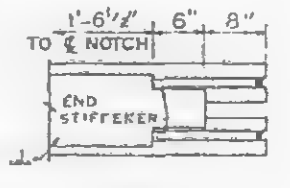
TOP VIEW DETAIL "B"

COVER PLATES
20 GA. THICK



COVER PLATE C

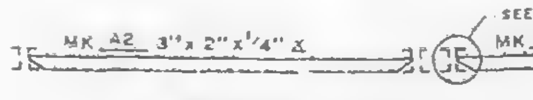
COVER PLATE J



DETAIL "F"

DETAIL "G"

FIELD PUNCH
COVER PLATES OVER
END STIFFENERS W.T.C. 223.00



SECTION A-A
END SUPPORT ANGLE

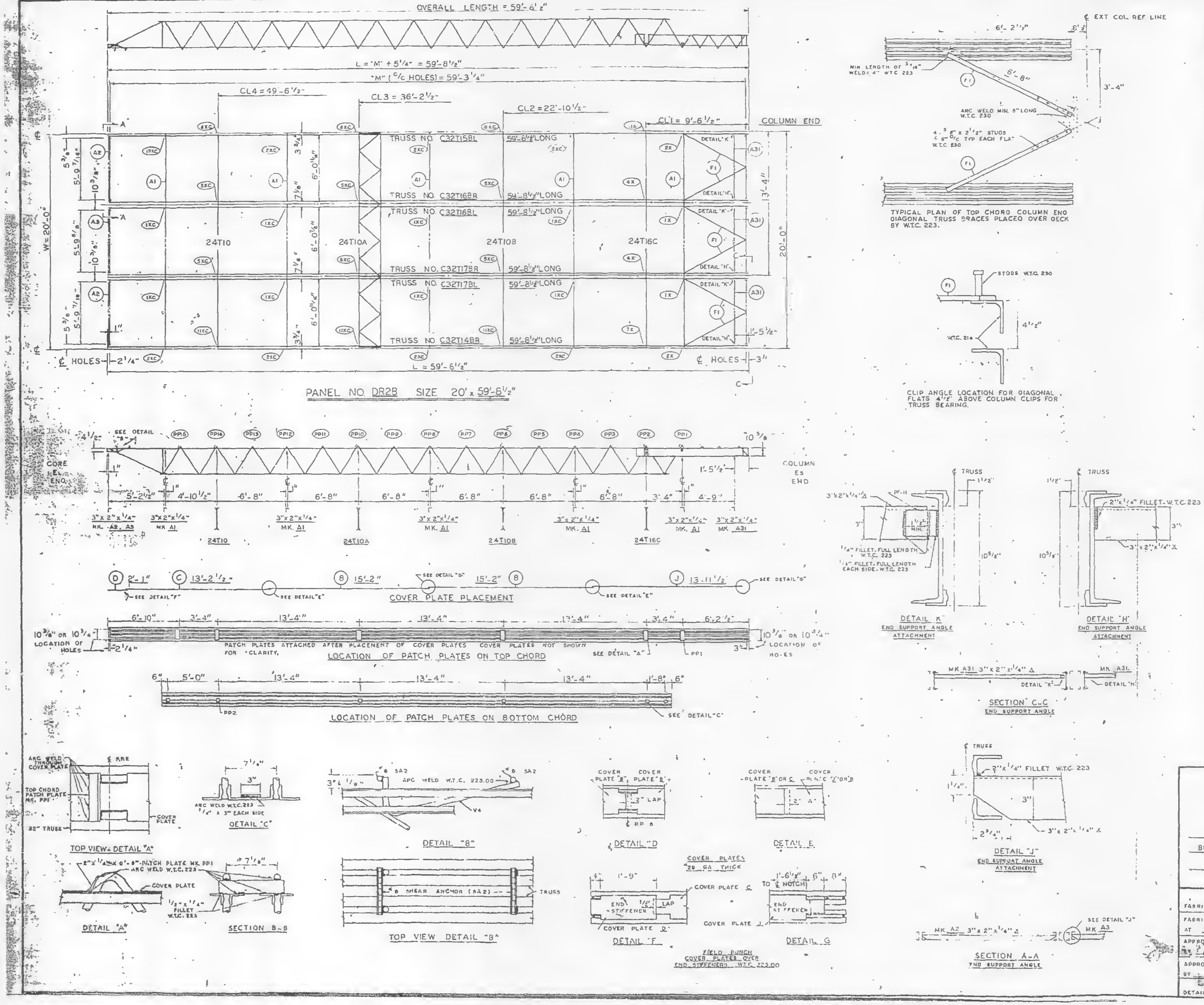
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL DR2A - 20' x 59'-9"

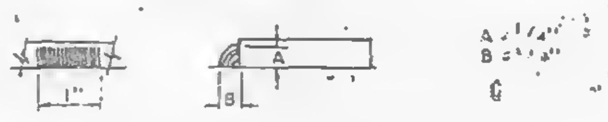
FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-31 | PLATE |
| APPROVED FOR FABRICATION BY FOR P O N Y A | DATE 6/6/69 | DRAWN BY R.R. DATE DEC. 5, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA DATE DEC. 5, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A.C. WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP DR2A |


OVERALL LENGTH = 59'-6 1/2"
L = "M" + 5 1/4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-3 1/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T15BL 59'-8 1/2" LONG
TRUSS NO. C32T16BR 59'-8 1/2" LONG
TRUSS NO. C32T16BL 59'-8 1/2" LONG
TRUSS NO. C32T17BR 59'-8 1/2" LONG
TRUSS NO. C32T17BL 59'-8 1/2" LONG
TRUSS NO. C32T14BR 59'-8 1/2" LONG
24T10
24T10A
24T10B
24T16C
DETAIL "K"
DETAIL "H"
W = 20'-0"
20'-0"
13'-4"
℄ HOLES
L = 59'-6 1/2"
PANEL NO. DR28 SIZE 20' x 59'-6 1/2"
COLUMN ES END
CORE ℄ END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
6'-2 1/2"
℄ EXT COL REF LINE
MIN LENGTH OF 5/16" WELD x 4" W.T.C. 223
ARC WELD MIN. 8" LONG W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION B-B
DETAIL "C"
DETAIL "B"
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES 28 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS. W.T.C. 223.00

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T14BR | 1 | C32T14BR x 59'-8 1/2" | ST 214BL |
| | T15BL | 1 | C32T15BL x 59'-8 1/2" | ST 215BL |
| | T16BL | 1 | C32T16BL X 59'-8-1/2" | ST 216BL |
| | T16BR | 1 | C32T16BR X 59'-8-1/2" | |
| | T17BL | 1 | C32T17BL X 59'-8-1/2" | ST 217BL |
| | T17BR | 1 | C32T17BR X 59'-8-1/2" | |
| BRIDGING TRUSSES | T10 | 1 | 24T10 x 19'-11" | BT 210C |
| | T10A | 1 | 24T10A x 19'-11" | BT 210D |
| | T10B | 1 | 24T10B x 19'-11" | BT 210E |
| | T16C | 1 | 24T16C x 19'-11" | BT 216B |
| 3"x 2"x 1/4" ANGLE | A1 | 5 | 3"x2"x1/4"x19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x1/4"x5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| | A31 | 3 | 3"x2"x1/4"x5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 16 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9"x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2"x 1 1/2"x .25"x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" Ø x 1'-3" | ST 400 |
| | CB4 | 6 | 1" Ø x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie.. (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CO 210 THRU CO 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



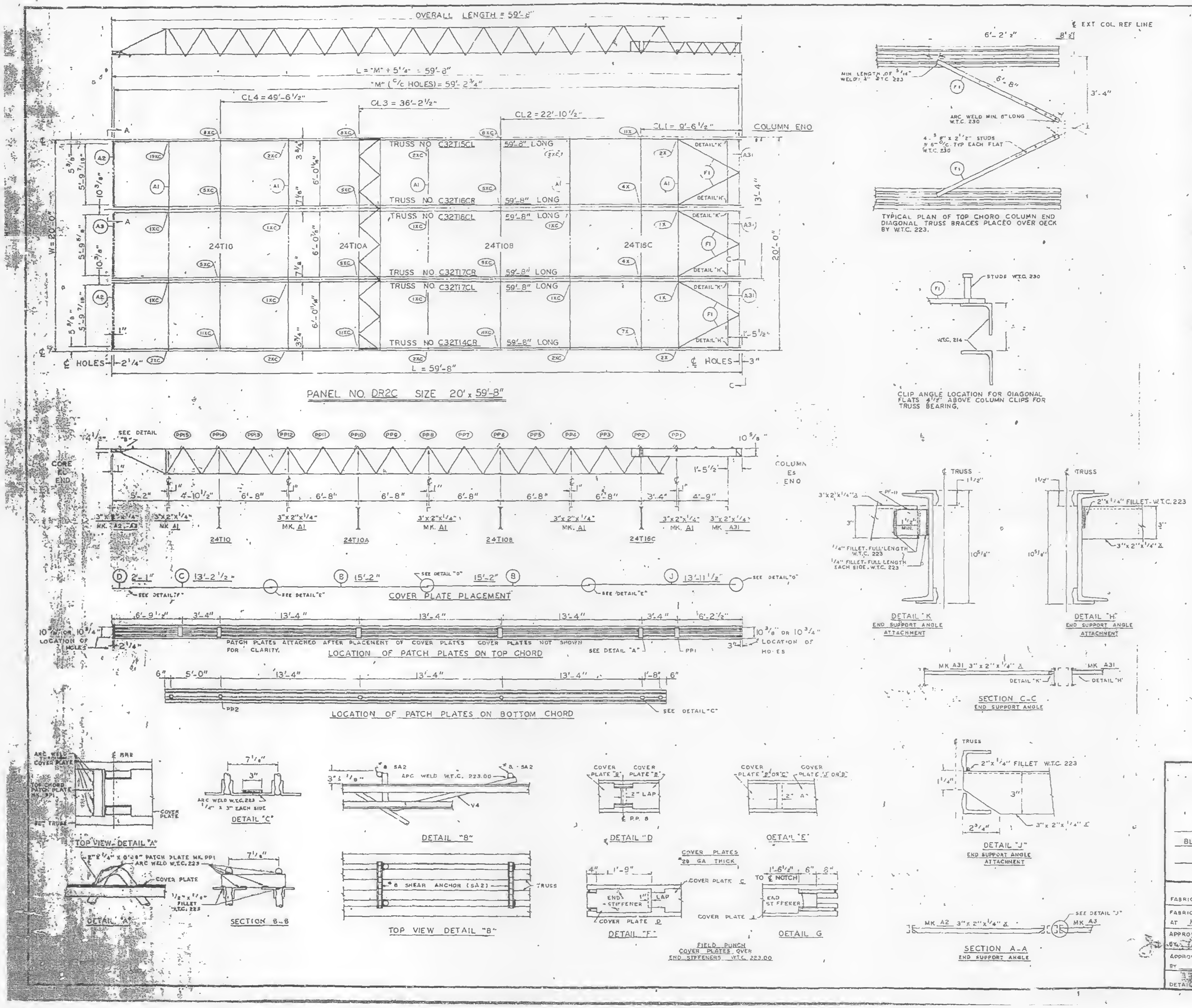
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| REF DRWG. | | |
|---|---|---|
| | 7-A83-31 | 10-4-68 |
| | 7-A84-28 | 7-22-68 |
| | 7-A81-13 | 10-4-68 |
| | 7-A81-14; 15 & 16 | 10-4-68 |
| | 7-A82-13 | 10-4-68 |
| | 7-A82-17 | 10-4-68 |
| | SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
W.R.D TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

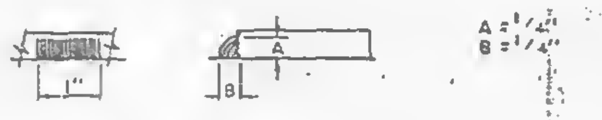
BLDG. A FLOORS [illegible]
PANEL DR28 - 20' x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-31
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 6/6/69
DRAWN BY [illegible] DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT NO W T C 221
SHEET NO FP DR28


OVERALL LENGTH = 59'-8"
L = "M" + 5 1/4" = 59'-8"
"M" (C/C HOLES) = 59'-2 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
W = 20'-0"
TRUSS NO C32T15CL 59'-8" LONG
TRUSS NO C32T16CR 59'-8" LONG
TRUSS NO C32T16CL 59'-8" LONG
TRUSS NO C32T17CR 59'-8" LONG
TRUSS NO C32T17CL 59'-8" LONG
TRUSS NO C32T14CR 59'-8" LONG
24T10
24T10A
24T10B
24T16C
DETAIL "K"
DETAIL "H"
℄ HOLES
L = 59'-8"
PANEL NO. DR2C SIZE 20' x 59'-8"
CORE END
COLUMN END
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW-DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL G
COVER PLATES 20 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
℄ EXT COL REF LINE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T14CR | 1 | C32T14CR x 59'-8" | ST 214CL |
| | T15CL | 1 | C32T15CL x 59'-8" | ST 215CL |
| | T16CL | 1 | C32T16CL x 59'-8" | ST 216CL |
| | T16CR | 1 | C32T16CR x 59'-8" | |
| | T17CL | 1 | C32T17CL x 59'-8" | ST 217CL |
| | T17CR | 1 | C32T17CR x 59'-8" | |
| BRIDGING TRUSSES | T10 | 1 | 24T10 x 19'-11" | BT 210C |
| | T10A | 1 | 24T10A x 19'-11" | BT 2100 |
| | T10B | 1 | 24T10B x 19'-11" | BT 210E |
| | T16C | 1 | 24T16C x 19'-11" | BT 216B |
| 3" x 2" x 1/4" ANGLE | A1 | 5 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 2 | 3" x 2" x 1/4" x 5'-11 9/16" | ST 403 |
| | A3 | 1 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 402 |
| | A31 | 3 | 3" x 2" x 1/4" x 5'-8 1/8" | ST 410 |
| | | | | |
| | | | | |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0135" x 13'-2 1/2" | ST 303 |
| | D | 3 | 9" x .0135" x 2'-1" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11 1/2" | ST 304 |
| ANGLE CLIPS | C1 | 24 | 2" x 1 1/2" x .25" x 6" | ST 400 |
| | | | | |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 5 | 1" ⌀ x 1'-3" | ST 400 |
| | CB4 | 6 | 1" ⌀ x 0'-10" | ST 400 |
| | | | | |
| CONNECTION PLATES | P1 | 3 | 3 1/2" x 3/8" x 0'-6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P4 | 3 | 6 1/2" x 1/2" x 0'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
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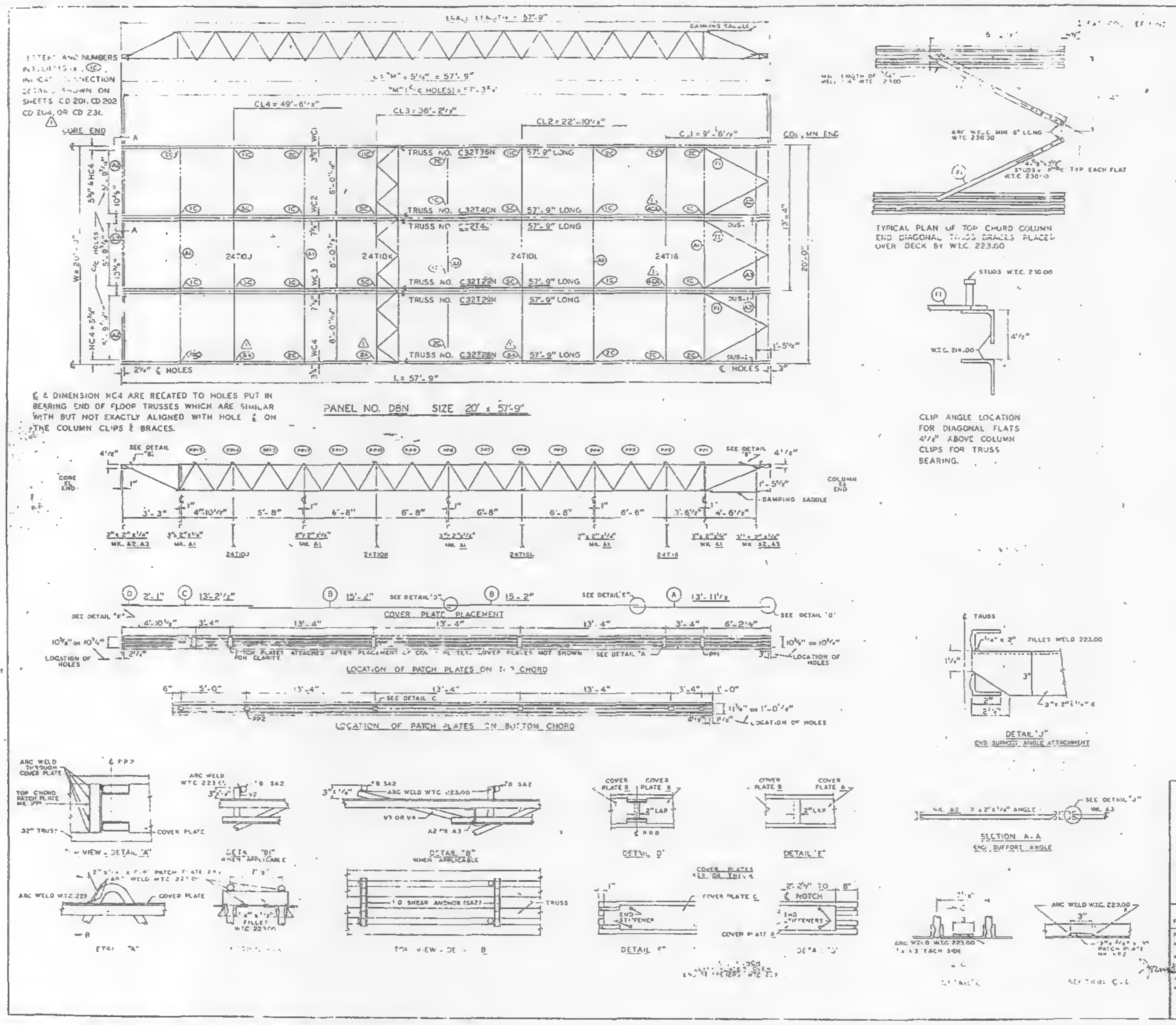
| REF. DRWG. | | |
|---|---|---|
| | 7-AB3-31 | 10-4-68 |
| | 7-AB4-28 | 7-22-68 |
| | 7-AB1-13 | 10-4-68 |
| | 7-AB1-14, 15 & 16 | 10-4-68 |
| | 7-AB2-13 | 10-4-68 |
| | 7-AB2-17 | 10-4-68 |
| | SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 59 & 92 (SOUTH)

PANEL DR2C - 20' x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-31 PLATE
APPROVED FOR FABRICATION BY FOR P O N Y A DATE 6/6/69
DRAWN BY DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A. C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP DR2C



LETTERS AND NUMBERS IN CIRCLES, ⓘC, INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204, OR CD 231.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOP TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DBN SIZE 20' x 57'-9"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T28N | 1 | C32T28N - 57'-9" | ST 228N |
| | T29N | 2 | C32T29N - 57'-9" | ST 229N |
| | T36N | 1 | C32T36N 57'-9" | ST 236N |
| | T40N | 2 | C32T40N - 57'-9" | ST 240N |
| BRIDGING TRUSSES | T10J | 1 | 24T10J - 19'-11" | BT 210J |
| | T10K | 1 | 24T10K - 19'-11" | BT 210K |
| | T10L | 1 | 24T10L - 19'-11" | BT 210L |
| | T16 | 1 | 24T16 - 19'-11" | BT 216 |
| 3"x 2"x ¼" ANGLE | A1 | 5 | 3"x 2" x ¼" x 10'-11" | ST 403 |
| | A2 | 4 | 3"x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3"x 2" x ¼" x 5'-11⅝" | ST 403 |
| DIAGONAL FLAT | F1 | 6 | 1½" x ⅜" x 8'-8" | ST 402 |
| COVER PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 15 | 5" x ⅜" x 0'-3" | ST 400 |
| | A | [illegible] | [illegible] .135" x 13'-11½" | ST 303 |
| | B | 6 | [illegible] .135" x 15'-2" | ST 303 |
| | C | 3 | [illegible] | ST 303 |
| | D | 3 | [illegible] | ST 303 |
| ANGLE CLIPS | C1 | 24 | [illegible] | ST 400 |
| #6 SHEAR ANCHOR | SA2 | 9 | #6 REBAR x 0'-8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½" x ⅜" x 3'-6⅝" | ST 298 |
| | DUS-2 | 1 | 3½"x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 10 | 1" ϕ x 1 - 3" △1 | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ¾" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .30" x 0'-9" | ST 400 |
| | P3 | [illegible] | 4½" x .30" x 1'-0" | ST 400 |
| | P4 | 3 | 6½" x ½" x 0'-8" | ST 400 |
| | P6 | 1 | 4½" x .30" x 0'-9" | ST 401 |

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| △1 | 4-22-69 | AS NOTED | abc |

REF. DRWGS.

| | |
|---|---|
| 7-A82-3 & 11 | 7-24-68 |
| 7-A83-58 | 11-6-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-26-68 |
| 7-A84-42 | 10-15-68 |
| SE-124 | 10-11-68 |
| 7-381-5 | 10-15-68 |
| 7-381-2 & 3 | 7-24-68 |

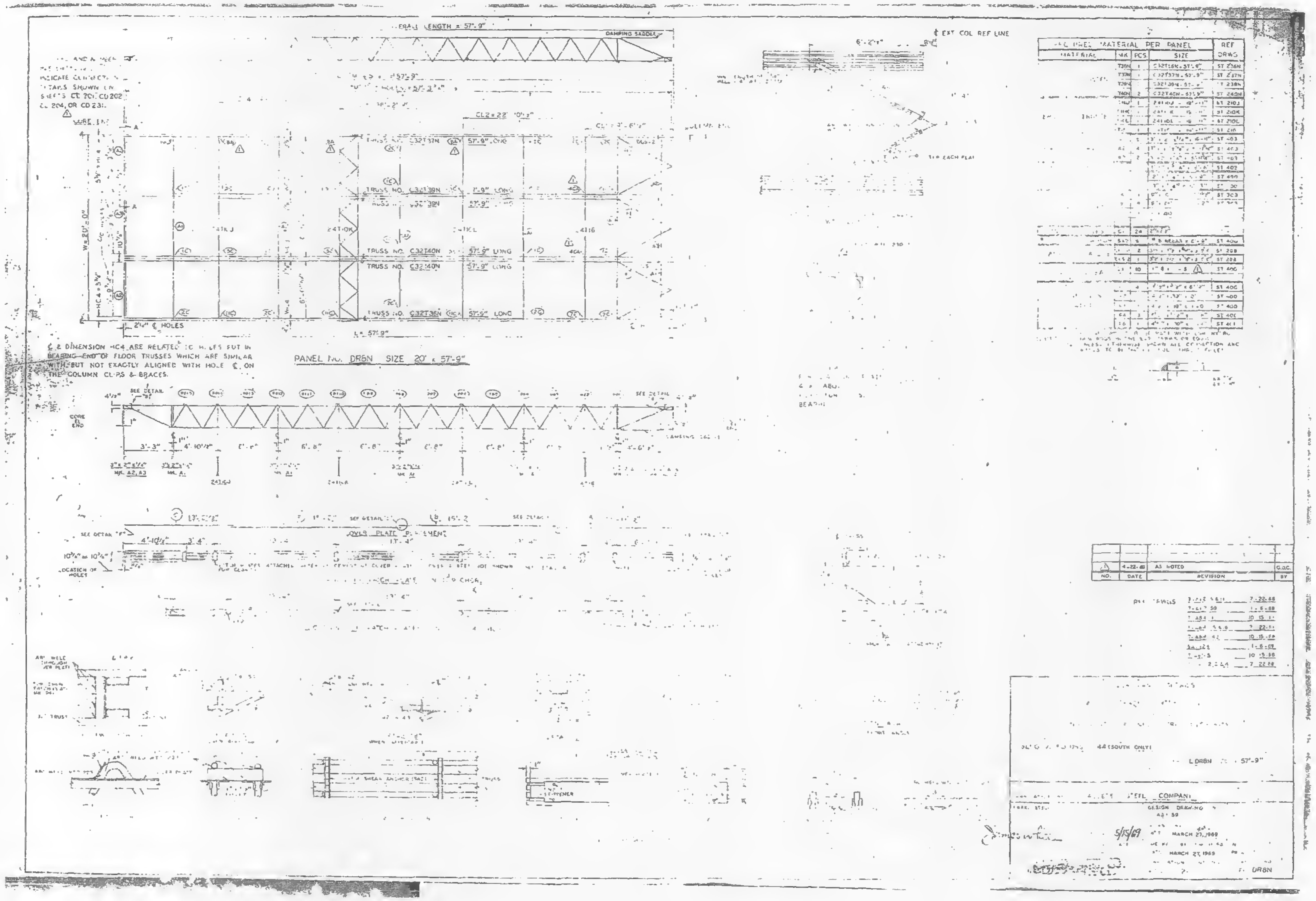
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (SOUTH ONLY)

PANEL DBN - 20 x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION DATE 5/15/69
APPROVED FOR FABRICATION DATE
DESIGN DRAWING NO 7-A83-58
DRAWN BY abc
DATE MARCH 26, 1969
CHECKED BY T. M. CHIURA
DATE MARCH 28, 1969
FABRICATION CONT NO 221
PROD #
SHEET NO FD DBN



A & DIMENSION HC4 ARE RELATED TO HOLES CUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL No. DR8N SIZE 20' x 57'-9"

| MATERIAL PER PANEL | | | | REF |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | DRWG |
| [illegible] | T36N | 1 | C32T36N - 57'-9" | ST 236N |
| | T37N | 1 | C32T37N - 57'-9" | ST 237N |
| | T38N | 1 | C32T38N - 57'-9" | ST 238N |
| | T40N | 2 | C32T40N - 57'-9" | ST 240N |
| [illegible] | [illegible] | 1 | 24T10J - 19'-11" | ST 210J |
| | [illegible] | 1 | 24T10K - 19'-11" | ST 210K |
| | [illegible] | 1 | 24T10L - 19'-11" | ST 210L |
| | [illegible] | 1 | [illegible] | ST 210 |
| [illegible] | [illegible] | 2 | [illegible] | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | [illegible] | 2 | [illegible] | ST 403 |
| | | | [illegible] | ST 402 |
| | | | [illegible] | ST 400 |
| | | | [illegible] | ST 300 |
| | [illegible] | [illegible] | [illegible] | ST 303 |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 24 | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | ST 400 |
| [illegible] | [illegible] | 2 | [illegible] | ST 208 |
| | [illegible] | [illegible] | [illegible] | ST 208 |
| [illegible] | [illegible] | 10 | [illegible] | ST 400 |
| [illegible] | [illegible] | 4 | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | 64 | 3 | [illegible] | ST 400 |
| | 76 | 1 | [illegible] | ST 401 |

UNLESS OTHERWISE SHOWN ALL CONNECTION ARE [illegible]

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 4-22-69 | AS NOTED | G.G.C. |

| REF DRAWINGS | |
|---|---|
| [illegible] | 7-22-68 |
| [illegible] 59 | 1-6-68 |
| [illegible] | 10-15-[illegible] |
| [illegible] | 7-22-[illegible] |
| [illegible] | 10-15-68 |
| [illegible] | 1-6-69 |
| [illegible] | 10-15-68 |
| [illegible] | 7-22-68 |

44 (SOUTH ONLY)

DR8N 57'-9"

STEEL COMPANY

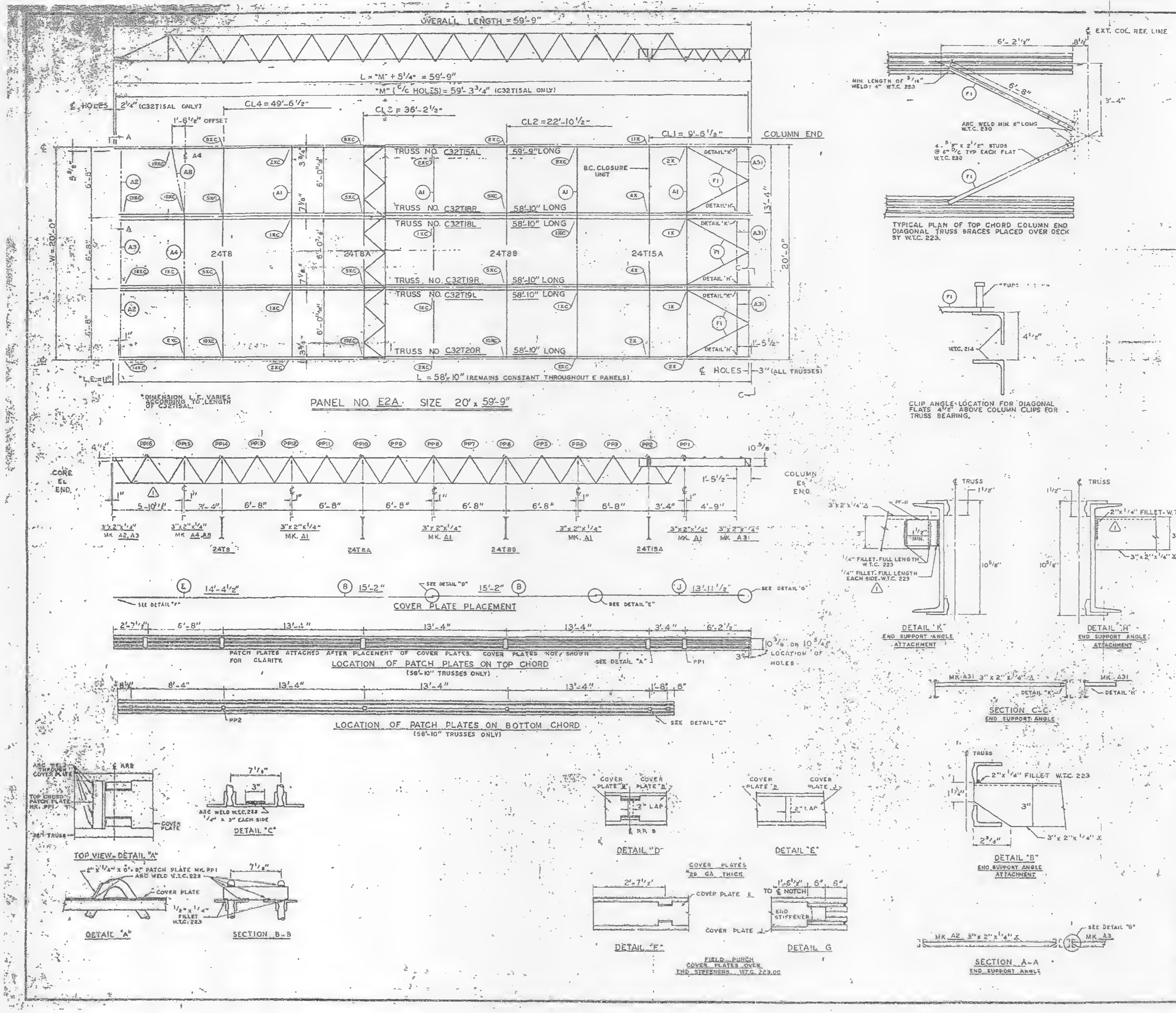
DESIGN DRAWING No.
AB-59

5/15/69

MARCH 27, 1969

MARCH 27, 1969

DR8N


OVERALL LENGTH = 59'-9"
L = "M" + 5 1/4" = 59'-9"
"M" (C/C HOLES) = 59'-3 3/4" (C32T15AL ONLY)
℄ HOLES 2 1/4" (C32T15AL ONLY)
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T15AL 59'-9" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T19R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T20R 58'-10" LONG
B.C. CLOSURE UNIT
24T8
24T8A
24T8B
24T15A
W = 20'-0"
L = 58'-10" (REMAINS CONSTANT THROUGHOUT E PANELS)
℄ HOLES 3" (ALL TRUSSES)
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T15AL.
PANEL NO. E2A SIZE 20' x 59'-9"
CORE EL END
COLUMN EL END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "B" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "C"
DETAIL "A"
SECTION B-B
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL G
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS. W.T.C. 223.00

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T15AL | 1 | C32T15AL x 59'-9" | ST 215AL |
| | T18L<br>T18R | 1<br>1 | C32T18L x 58'-10"<br>C32T18R x 58'-10" | ST 218L |
| | T19L<br>T19R | 1<br>1 | C32T19L x 58'-10"<br>C32T19R x 58'-10" | ST 219L |
| | T20R | 1 | C32T20R x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | BT 208 |
| | T8A | 1 | 24T8A x 19'-11" | BT 208A |
| | T8B | 1 | 24T8B x 19'-11" | BT 208B |
| | T15A | 1 | 24T15A x 9'-11" | BT 215A |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x 2"x 1/4"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x 2"x 1/4"x 5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x 1/4"x 5'-11 3/4" | ST 403 |
| | A4 | 1 | 3"x 2"x 1/4"x 13'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x 1/4"x 6'-8 5/8" | ST 405 |
| | A31 | 3 | 3"x 2"x 1/4"x 5'-8 1/8" | ST 410 |
| CLOSURE PLATES | PF-11 | 3 | 3"x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4" x 0'-8" | ST 400 |
| | PP2 | 8 | 3"x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 8 | 9"x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135" x 14'-4 1/2" | ST 303 |
| | J | 3 | 9"x .0135" x 13'-11 1/2" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1 1/4" Ø x 6'-6 1/2" | BT 215A |
| ANGLE CLIPS | C1 | 20 | 2"x 1 1/2"x .25"x 6" | ST 400 |
| | C2 | 4 | 2 1/2"x 1 1/2"x .25"x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" Ø x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/4" Ø x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" Ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2"x 3/8"x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2"x 1/4"x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2"x .39"x 0'-9" | ST 401 |
| | P9 | 6 | 3"x 1/2"x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| 2 | 7-1-69 | AS NOTED | G.D.C. |
| 1 | 2-4-69 | AS NOTED | G.D.C. |

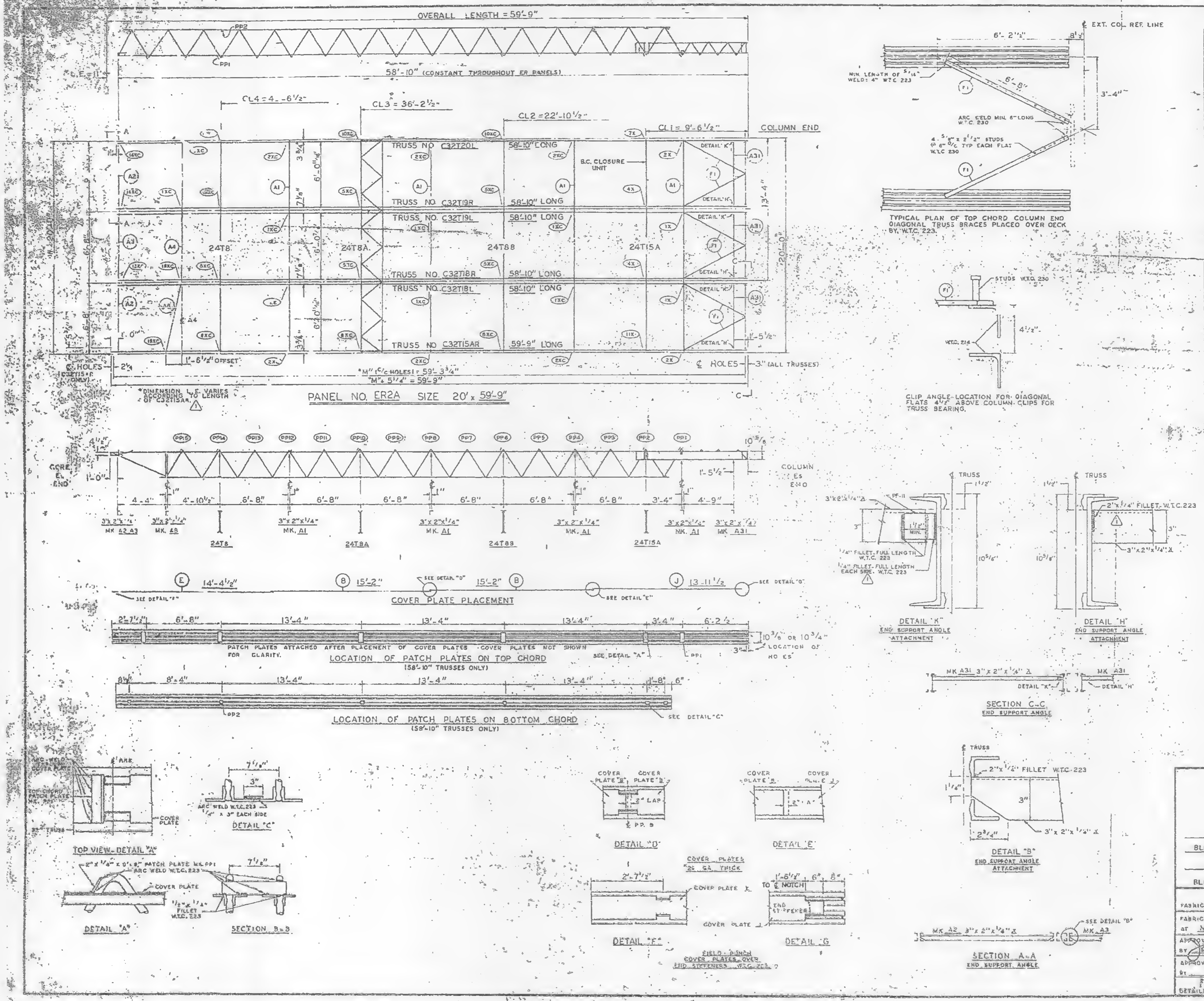
| REF. DRWG. | | |
|---|---|---|
| | 7-AB3-32 | 10-4-68 |
| | 7-AB3-24 | 8-15-68 |
| | 7-AB1-14, 17, 18 & 19 | 10-4-68 |
| | 7-AB2-3 | 7-22-68 |
| | 7-AB2-14 | 10-4-68 |
| | SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
P. E2A - 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-AB3-32 PLATE | |
| APPROVED FOR FABRICATION BY James White P.N.Y.A. | DATE 1/2/70 | DRAWN BY | DATE DEC. 5, 1968 |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA DATE DEC. 5, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A.C. WEBER | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP-E2A |


OVERALL LENGTH = 59'-9"
PP2
PP1
58'-10" (CONSTANT THROUGHOUT ER PANELS)
CL4 = 4'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T20L 58'-10" LONG
TRUSS NO. C32T19R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T15AR 59'-9" LONG
B.C. CLOSURE UNIT
DETAIL "K"
DETAIL "H"
24T8
24T8A
24T8B
24T15A
1'-6 1/2" OFFSET
℄ HOLES
℄ HOLES - 3" (ALL TRUSSES)
"M" ℄-℄ HOLES = 59'-3 3/4"
"M" 5 1/4" = 59'-9"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T15AR
PANEL NO. ER2A SIZE 20' x 59'-9"
6'-2 1/2"
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
ARC WELD MIN. 6" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
COLUMN END
CORE END
4'-4"
4'-10 1/2"
6'-8"
3'-4"
4'-9"
3"x2"x1/4" MK. A2 A3
3"x2"x1/4" MK. A8
3"x2"x1/4" MK. A1
3"x2"x1/4" MK. A31
14'-4 1/2"
15'-2"
13'-11 1/2"
SEE DETAIL "E"
SEE DETAIL "D"
COVER PLATE PLACEMENT
2'-7 1/2"
13'-4"
6'-2 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES - COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
SEE DETAIL "A"
10 3/8" OR 10 3/4" LOCATION OF HOLES
8'-4"
1'-8"
6"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
SEE DETAIL "C"
TRUSS
PF-11
1/4" FILLET FULL LENGTH W.T.C. 223
1/4" FILLET FULL LENGTH EACH SIDE W.T.C. 223
10 5/8"
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET W.T.C. 223
3"x2"x1/4" L
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK. A31 3"x2"x1/4" L
SECTION C-C END SUPPORT ANGLE
2"x1/4" FILLET W.T.C. 223
DETAIL "B" END SUPPORT ANGLE ATTACHMENT
MK. A2 3"x2"x1/4" L
MK. A3
SEE DETAIL "B"
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
COVER PLATE
7 1/8"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
DETAIL "C"
2" x 1/4" x 0'-9" PATCH PLATE MK. PP1
ARC WELD W.T.C. 223
1/8" x 1/4" FILLET W.T.C. 223
DETAIL "A"
SECTION B-B
COVER PLATE "B"
COVER PLATE "D"
3" LAP
DETAIL "D"
COVER PLATE "E"
COVER PLATE "A"
DETAIL "E"
COVER PLATES 26 GA. THICK
2'-7 1/2"
COVER PLATE
DETAIL "F"
FIELD - PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223
1'-6 1/2"
TO ℄ NOTCH
END STIFFENER
DETAIL "G"

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T15AR | 1 | C32T15AR x 59'-9" | ST 215AL |
| | T18L | 1 | C32T18L x 58'-10" | ST 218L |
| | T18R | 1 | C32T18R x 58'-10" | |
| | T19L | 1 | C32T19L x 58'-10" | ST 219L |
| | T19R | 1 | C32T19R x 58'-10" | |
| | T20L | 1 | C32T20L x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | BT 208 |
| | T8A | 1 | 24T8A x 19'-1" | BT 208A |
| | T8B | 1 | 24T8B x 18'-11" | BT 208B |
| | T15A | 1 | 24T15A x 19'-11" | BT 215A |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x2"x1/4"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x1/4"x5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x2"x1/4"x5'-11 3/4" | ST 403 |
| | A4 | 1 | 3"x2"x1/4"x13'-3" | ST 403 |
| | A8 | 1 | 3"x2"x1/4"x6'-8 5/8" | ST 405 |
| | A31 | 3 | 3"x2"x1/4"x5'-8 1/8" | ST 410 |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11 1/2" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1 1/4" Ø x 6'-8 1/2" | BT 215A |
| ANGLE CLIPS | C1 | 20 | 2"x1 1/2"x.25"x 6" | ST 400 |
| | C2 | 4 | 2 1/2"x1 1/2"x.25"x 8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" Ø x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/8" Ø x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" Ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 7-1-69 | AS NOTED | G.D.C. |
| 1 | 2-4-69 | AS NOTED | G.D.C. |

REF. DRWG.

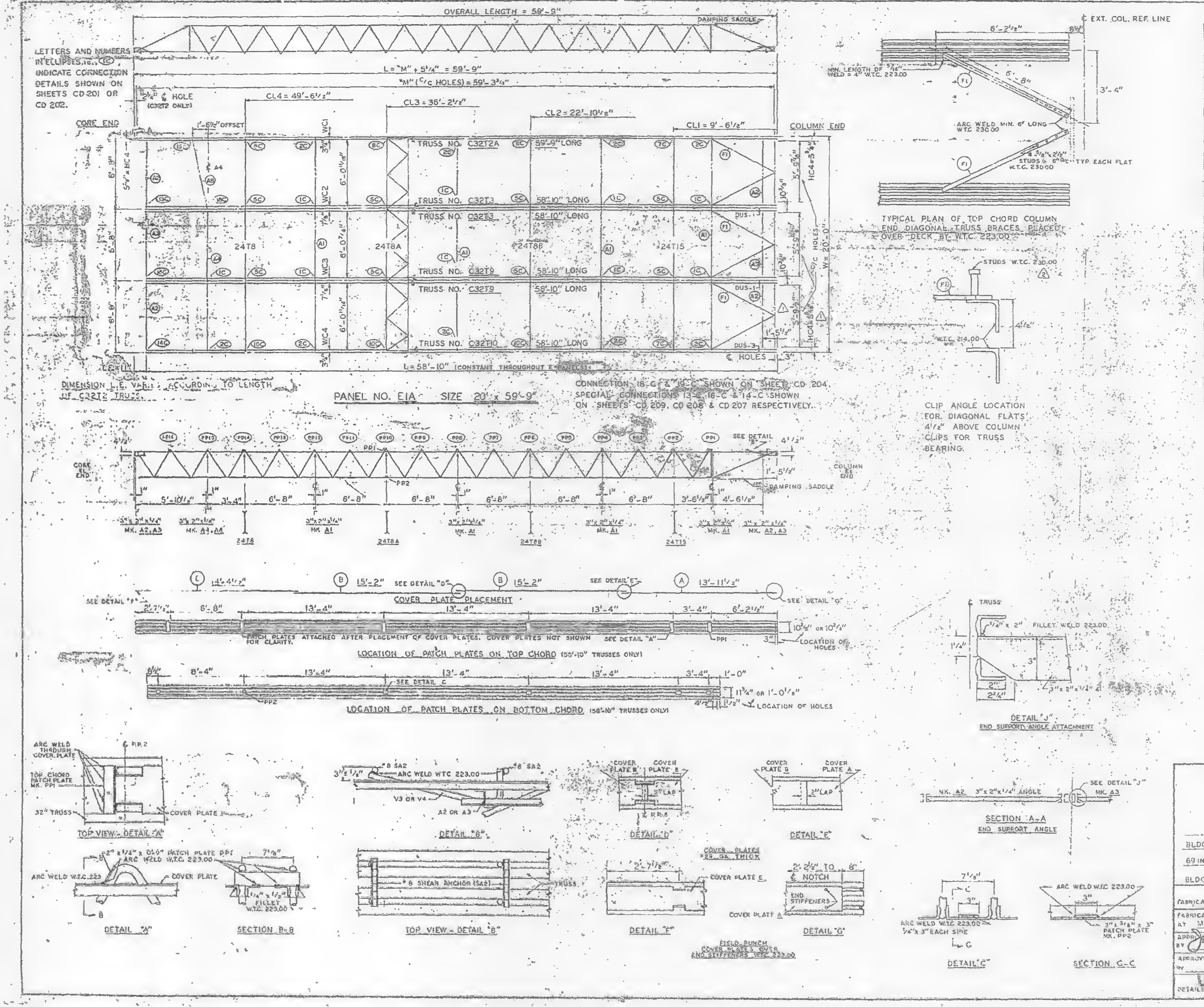
| | |
|---|---|
| 7-A83-23 | 10-4-68 |
| 7-A83-24 | 8-15-68 |
| 7-A81-14, 17, 18 & 19 | 10-4-68 |
| 7-A82-3 | 7-22-68 |
| 7-A82-14 | 10-4-68 |
| 5A-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL ER2A = 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 [illegible]

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-A83-32 PLATE | |
| APPROVED FOR FABRICATION BY James White A | DATE 1/2/70 | DRAWN BY [illegible] DATE DEC. 5, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA DATE DEC. 5, 1968 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO DETAILED BY A.C. WEBER | | FABRICATION CONT. NO W.T.C. 221 | SHEET NO FP ER2A 1 |


OVERALL LENGTH = 59'-9"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, I.E. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
L = "M" + 5 1/4" = 59'-9"
"M" (C/C HOLES) = 59'-3 3/4"
2 1/2" ℄ HOLE (C32T2 ONLY)
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/8"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
1'-6 1/2" OFFSET
TRUSS NO. C32T2A 59'-9" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
DUS-1
DUS-3
℄ HOLES
L = 58'-10" (CONSTANT THROUGHOUT E PANELS)
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS
PANEL NO. E1A SIZE 20' x 59'-9"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
6'-2 1/2"
8 1/2"
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 1/4" WELD = 4" W.T.C. 223.00
6'-8"
3'-4"
ARC WELD MIN. 6" LONG W.T.C. 230.00
4 5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
PP1
PP2
5'-10 1/2"
3'-4"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6 1/2"
4'-6 1/2"
1'-5 1/2"
3"x 2"x 1/4" MK. A2, A3
3"x 2"x 1/4" MK. A4, A6
3"x 2"x 1/4" MK. A1
3"x 2"x 1/4" MK. A1
3"x 2"x 1/4" MK. A1
3"x 2"x 1/4" MK. A1
3"x 2"x 1/4" MK. A2, A3
24T8
24T8A
24T8B
24T15
14'-4 1/2"
15'-2"
15'-2"
13'-11 1/2"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
COVER PLATE PLACEMENT
6'-8"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2 1/2"
10 1/8" OR 10 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
8'-4"
13'-4"
13'-4"
13'-4"
3'-4"
1'-0"
SEE DETAIL C
11 3/4" OR 1'-0 1/8"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
TRUSS
1/4" x 2" FILLET WELD 223.00
3"x 2"x 1/4"
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
#8 SA2
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
COVER PLATE B
COVER PLATE B
3" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
MK. A2 3"x 2"x 1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A END SUPPORT ANGLE
2" x 1/4" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
COVER PLATE
DETAIL "A"
1 1/4" x 1/2" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES 22 GA. THICK
2'-7 1/2"
COVER PLATE E
COVER PLATE A
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2'-2 1/2" TO 8"
℄ NOTCH
END STIFFENERS
DETAIL "G"
7 1/8"
3"
ARC WELD W.T.C. 223.00 1/4"x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3"x 3/16"x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T2A | 1 | C32T2A - 59'-9" | ST 201A |
| | T3 | 2 | C32T3 - 58'-10" | ST 2[illegible] |
| | T9 | 2 | C32T9 - 58'-10" | ST 2[illegible] |
| | T10 | [illegible] | C32T10 - 58'-10" | ST [illegible] |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST [illegible] |
| | T8A | | 24T8A - 19'-11" | ST [illegible] |
| | T8B | | 24T8B - 19'-11" | ST [illegible] |
| | T15 | [illegible] | 24T15 - 19'-11" | ST [illegible] |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x 2"x 1/4"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x 1/4" x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3"x 2"x 1/4" x 5'-11 3/4" | ST 403 |
| | A4 | [illegible] | 3"x 2"x 1/4" x [illegible] | ST 403 |
| | A6 | [illegible] | 3"x 2"x 1/4" x 6'-[illegible] | ST 403 |
| DIAGONAL FLATS | [illegible] | 6 | [illegible] | [illegible] |
| COVER PLATES | A | 3 | 9"x .0135" x 13'-11 1/2" | ST 403 |
| | B | 6 | 9"x .0135" x 15'-2" | ST 403 |
| | E | 3 | 9"x .0135" x 14'-4 1/2" | ST 403 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2"x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2"x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ∅ x 1'-3" | ST 400 |
| | CB2 | 8 | 1 1/16" ∅ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" ∅ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3" x 3/8" x [illegible] | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/16" x 0'-3" | ST 400 |

(1) ALL ARC-WELD TO BE MADE WITH LOW HY. ROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| △2 | 6-18-69 | AS NOTED | G.A.C. |
| △1 | 9-10-68 | AS NOTED | T.R.C. |

△2 REF. DRWGS.

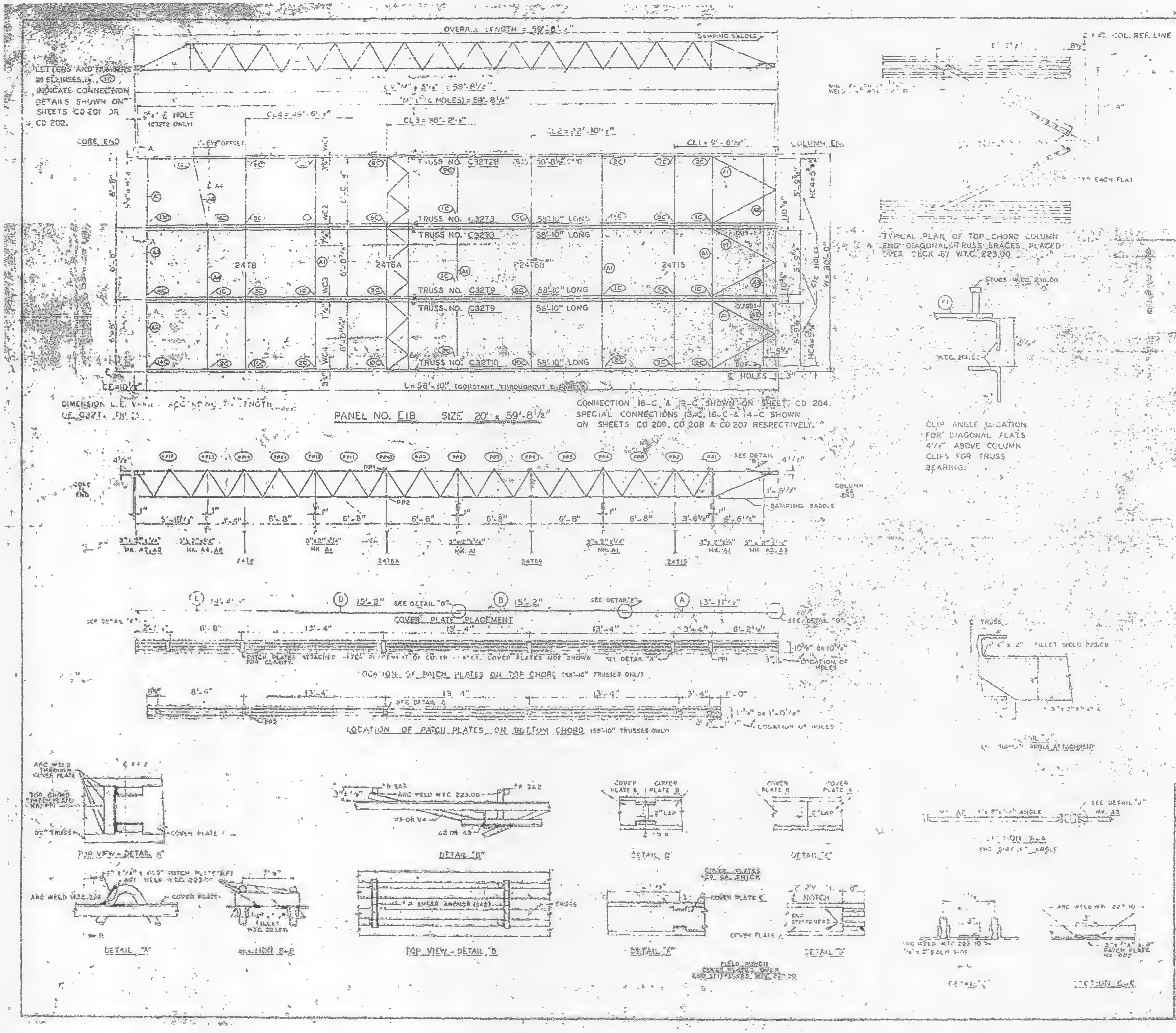
| | |
|---|---|
| 7-AB2, 3 & 10 | 7.22.68 |
| 7-AB3-11 | 10.15.68 |
| 7-AB4-3.1 | 1.3.68 |
| 7-AB4-15, 16 & 34 | 7.22.68 |
| 7-AB4-42 & 3 | 8.15.68 |
| SA-124 | 1.5.68 |
| 7-AB1-3 | 7.22.68 |
| 7-AB1-6, 7 & 8 | 7.22.68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49, 58, 60-66, 68, 69 (NORTH)
PANEL E1A - 20' x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49 [illegible] (WEST) △2

FABRICATION BY LACLEDE STEEL COMPANY

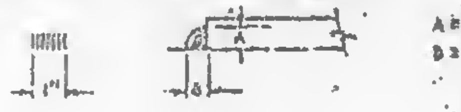
| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-11 | PLATE |
| APPROVED FOR FABRICATION BY James W. Rogers | DATE 1/2/70 | DRAWN BY G.A.C. DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA DATE JULY 22, 1968 | IN CHARGE OF PROD. M.V. |
| DETAILED BY CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E1A |



| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T28 | 1 | C32T28 - 59'-8½" | ST 202B |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x2"x¼" ANGLE | A | 4 | 3"x2"x¼"x19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x¼"x5'-[illegible] | ST 403 |
| | A3 | 2 | 3"x2"x¼"x5'-[illegible] | ST 403 |
| | A4 | 1 | 3"x2"x¼"x19'-3" | ST 403 |
| | A8 | 1 | 3"x2"x¼"x6'-8⅞" | ST 403 |
| DIAGONAL FLATS | | 6 | 1"x[illegible]"x6'-6" | ST 402 |
| COVER PLATES | A | 3 | 9"x.0135"x13'-11½" | ST 303 |
| | B | 8 | 5"x.0135"x15'-2" | ST 303 |
| | E | 5 | 9"x.0135"x14'-4½" | ST 303 |
| | [illegible] | | [illegible] | |
| ANGLE CLIPS | C1 | 20 | 2"x1½"x¼"x0'-5" | ST 400 |
| | C2 | 4 | 2½"x1½"x¼"x6" | ST 400 |
| DAMPING SADDLE | DUS1 | 2 | 3½"x3½"x⅜"x3'-6⅜" | ST 298 |
| | DUS3 | 1 | 3½"x3½"x⅜"x3'-6⅜" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" φ x 1'-3" | ST 400 |
| | CB2 | 8 | [illegible] | ST 400A |
| | CB3 | 6 | 1⅜" φ x 1'-9" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½"x¾"x6½" | ST 400 |
| | P2 | 1 | 4'-2"x.34"x0'-8" | ST 400 |
| | P3 | 1 | 4½"x.34"x1'-[illegible] | ST 400 |
| | P5 | 1 | 4½"x⅞"x1'-8" | ST 400 |
| | PC | 1 | 4'-[illegible]"x[illegible]"x0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-[illegible]" | [illegible] |
| PATCH PLATES | PP1 | 18 | 2"x¼"x0'-9" | ST 400 |
| | PP2 | 18 | 3"x¼"x1'-[illegible]" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. HOGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

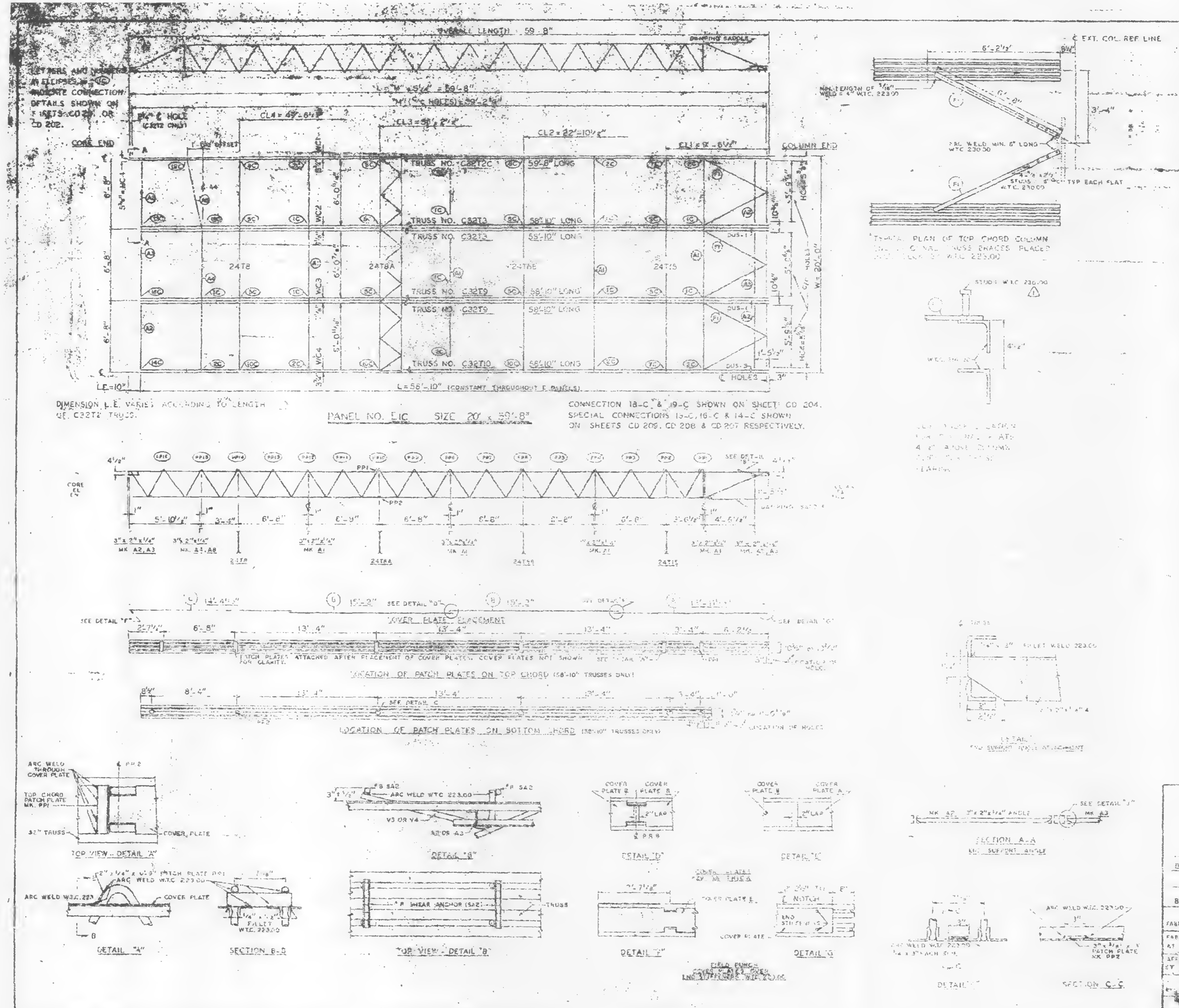


| NO | DATE | REVISION | |
|---|---|---|---|
| 1 | 6-18-69 | AS NOTED | [illegible] |

1 REF. DRWGS.
7-A82-3 & 7 — 7-22-68
7-A63-1 — 10-15-69
7-A84-31 — 7-[illegible]
7-A84-15 & 18-39 — 7-22-68
7-A84-42 & 3 — 10-15-68
56-124 — 1-5-69
7-A81-3 — 7-22-68
7-A81-6, 7 & 8 — 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 84-91, 93-106 (N)
PANEL E1B
BLDG. B FLOORS 84-91, 93-105 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A8341
APPROVED FOR FABRICATION BY [illegible] FOR PONYA — DATE [illegible]
DRAWN BY [illegible] DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR — DATE
CHECKED BY: [illegible] DATE NOV. 4, 1968
FABRICATION CONT. NO. W.T.C. 221

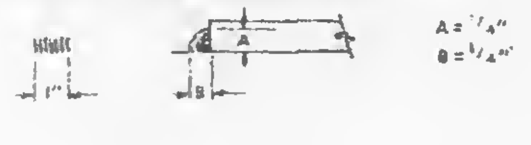


LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
OVERALL LENGTH 59'-8"
DAMPING SADDLE
CORE END
COLUMN END
CL4 = 49'-6"
CL3 = 38'-2"
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T2C 59'-8" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
L = 58'-10" (CONSTANT THROUGHOUT E PANELS)
LE = 10"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. E1C SIZE 20' x 59'-8"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 15-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
TYPICAL PLAN OF TOP CHORD COLUMN
ARC WELD MIN. 6" LONG W.T.C. 223.00
C EXT. COL. REF LINE
SECTION A-A
DETAIL
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼"x 5'-1¾" | ST 403 |
| | A3 | 2 | 3"x 2"x¼"x 5'-1¾" | ST 403 |
| | A4 | 1 | 3"x 2"x¼"x 13'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x¼"x 6'-8⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½"x ⅝"x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x .0135"x 18'-11½" | ST 303 |
| | B | 6 | 9"x .0135"x 18'-2" | ST 303 |
| | E | 3 | 9"x .0135"x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2"x 2½"x ¼"x 0'-6" | ST 400 |
| | C2 | 4 | 2½"x 1½"x ¼"x 8" | ST 400 |
| DAMPING SADDLE | DUS-4 | 2 | 3½"x 3½"x ⅜"x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½"x 3½"x ⅜"x 3'-6" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ∅ x 1'-3" | ST 400 |
| | CB2 | 5 | 1⅛" ∅ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ∅ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 2"x ⅜"x 0'-[illegible] | ST 400 |
| | P2 | 1 | 4½"x .39"x 0'-8" | ST 400 |
| | P3 | 1 | 4½"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4½"x ¼"x 1'-6" | ST 400 |
| | P6 | 1 | 4½"x .39"x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible] | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x ¼"x 0'-8" | ST 400 |
| | PP2 | 18 | 3"x ⅜"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 5-18-69 | AS NOTED | G.D.C. |

1 REF. DRWGS.

| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-11 | 10-15-68 |
| 7-AB4-3.1 | 1-3-68 |
| 7-AB4-15 & 16, 30 | 7-22-68 |
| 7-AB4-42 & 3 | 10-[illegible]-68 |
| SS-124 | 1-6-69 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-6, 7 A B | 7-22-68 |

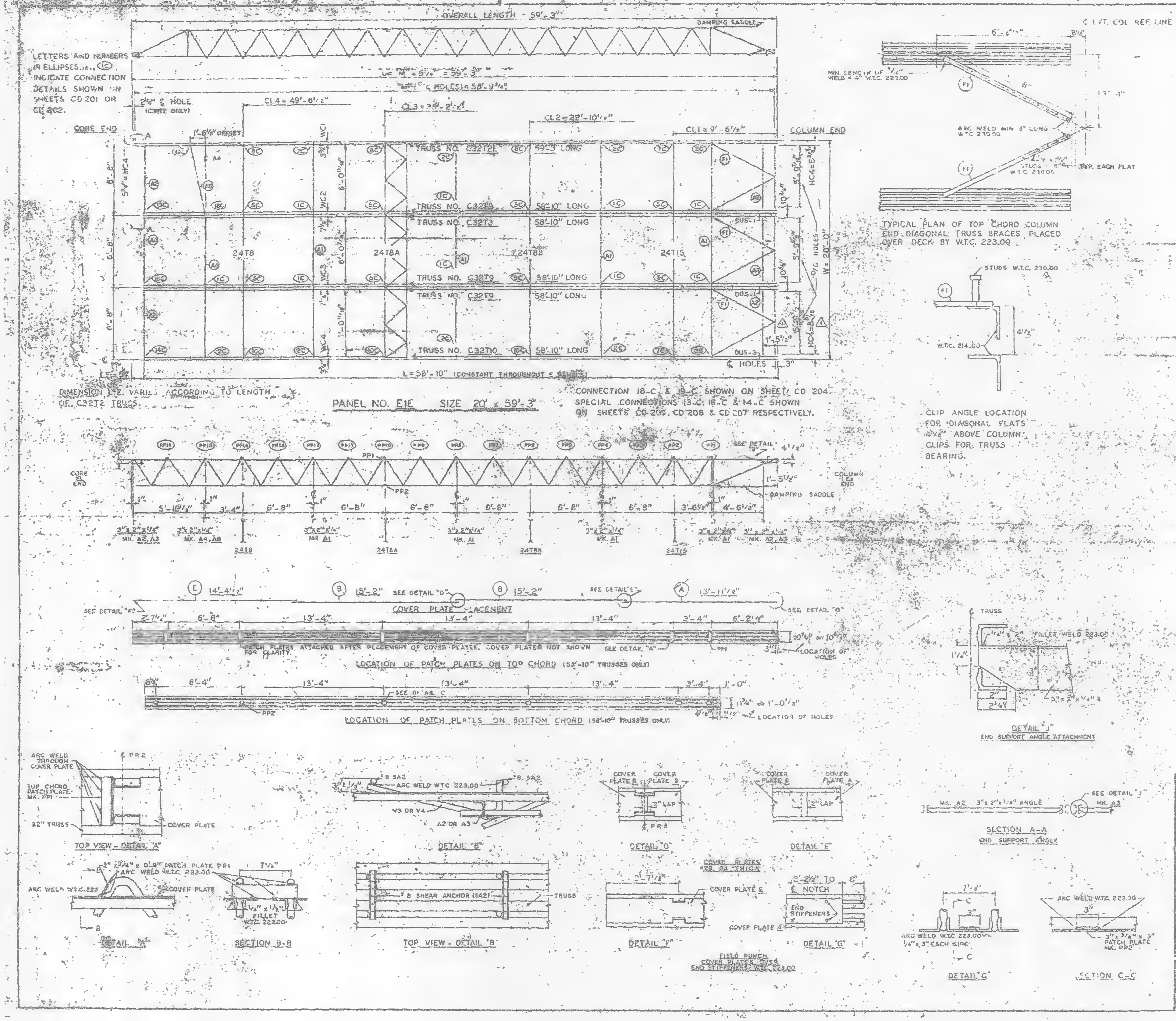
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91, 93-106 (S)
PANEL E1C - 20' x 59'-8"
BLDG. B FLOORS 50-58, 60-74, 79-91, 93-10[illegible] (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS. | | DESIGN DRAWING NO. 7-AB2-[illegible] | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. | DATE [illegible] | DRAWN BY: G.D.C.<br>DATE: NOV. 1, 1968 | |
| APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR | DATE | CHECKED BY: E.M.CHURA<br>DATE NOV. 4, 1968 | IN CHARGE OF PROJ. [illegible] |
| DETAILED BY LACLEDE STEEL | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. [illegible] E1C |

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.



PANEL NO. E1E SIZE 20' x 59'-3"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 205, CD 208 & CD 207 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

TOP VIEW - DETAIL "A"

DETAIL "A"

SECTION B-B

DETAIL "B"

TOP VIEW - DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "F"

DETAIL "G"

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

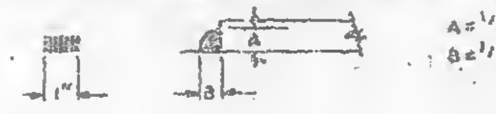
DETAIL "C"

SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T2E | 1 | C32T2E - 59'-3" | ST 202E |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-1" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST [illegible] |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x 2"x 1/4" x [illegible] | ST 403 |
| | A2 | 4 | 3"x 2"x 1/4" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3"x 2"x 1/4" x 5'-11⅝" | [illegible] |
| | A4 | 1 | 3"x 2"x 1/4" x [illegible] | ST 403 |
| | A8 | 1 | 3"x 2"x 1/4" x 6'-5⅝" | ST 403 |
| DIAGONAL FLATS | F1 | 2 | 1½"x 5/8"x [illegible]-8" | [illegible] |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135"x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2"x 1½"x 1/4"x 0'-6" | ST 400 |
| | C2 | 4 | 2½"x 1½"x 1/4"x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x 3/8"x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½"x 3½"x 3/8"x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | [illegible] | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 5 | 1⅛" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅛" ϕ x 1'-9" | ST 400 |
| CONNECTION PLATES. | P1 | 5 | 3½"x 3/8"x 0'-7" | ST 400 |
| | P2 | 1 | 4⅛"x .39"x 0'-6" | ST 400 |
| | P3 | 1 | 4½"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4½"x 1/4"x 1'-6" | ST 400 |
| | P6 | 1 | 4½"x .39"x 0'-5" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-4" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" MIN. THROAT FILLET.



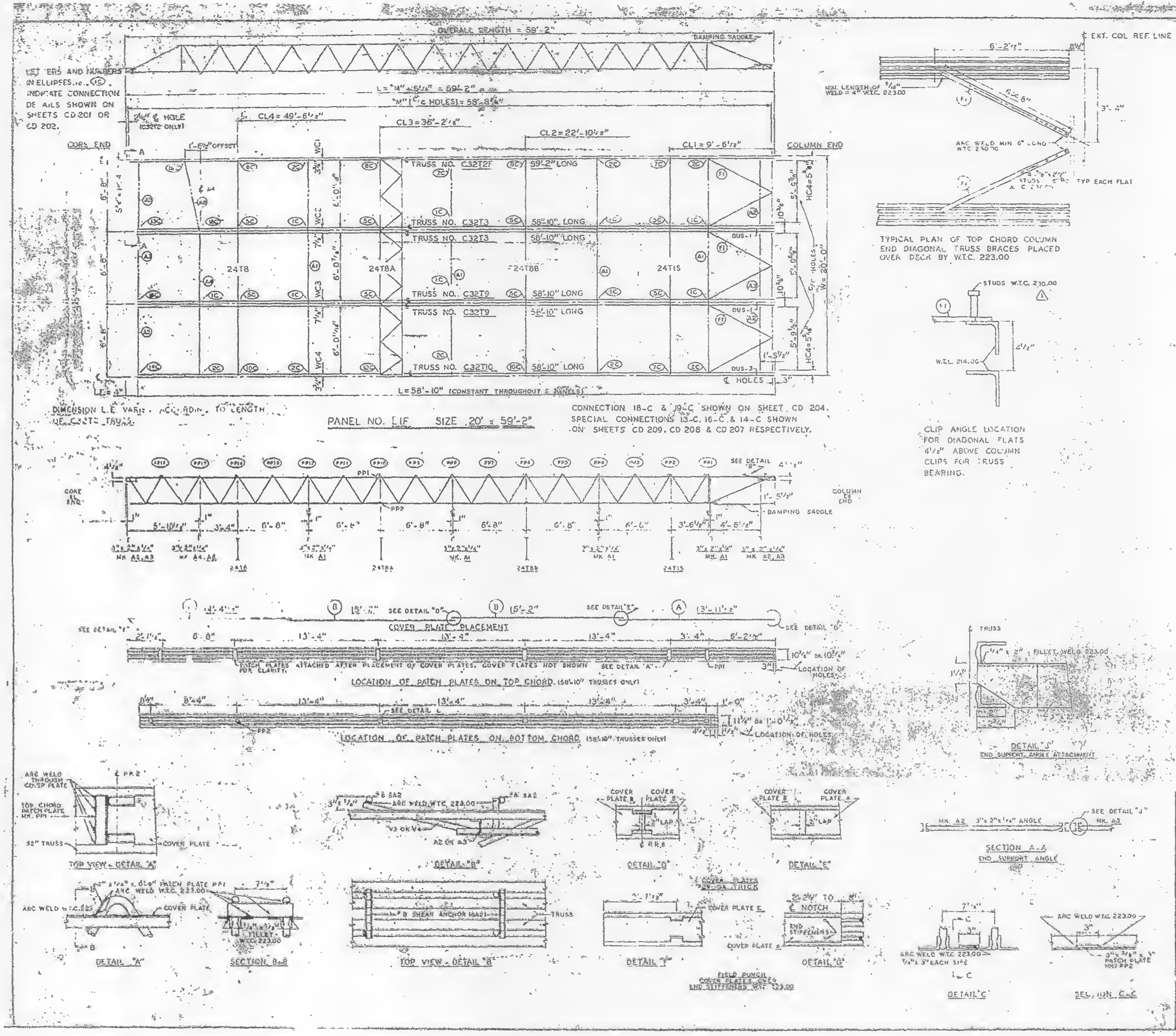
| NO. | DATE | REVISION | |
|---|---|---|---|
| 2 | 6-18-69 | AS NOTED | G.D.C. |
| 1 | 9-10-68 | AS NOTED | T.M.C. |

2 REF. DRWGS.
7-A92-3 & 10 7-22-68
7-A23-11 10-15-68
7-A84-31 1-3-69
7-A84-19, 16 & 39 [illegible]
7-A84-42 & 3 10-15-68
SA 124 1-5-69
7-A91-3 7-24-68
7-A91-6, 7 & 8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
69 (NORTH) PANEL E1E 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.O.N.Y.A DATE 1/2/[illegible]
APPROVED FOR FABRICATION [illegible] DATE
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO 7-A83-11
DRAWN BY: G.d.C. DATE JULY 22, 1968
CHECKED BY: T.M. CHURA DATE JULY 22, 1968
FABRICATION CONT. NO W.T.C. 221
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO FP E1E



OVERALL LENGTH = 59'-2"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
L = "M" + 5 1/2" = 59'-2"
"M" (℄ c HOLES) = 58'-8 3/4"
2 1/4" ℄ HOLE (C32T2 ONLY)
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
1'-6 3/4" OFFSET
TRUSS NO. C32T2F 59'-2" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
DUS-1
DUS-3
HC4 = 5 3/8"
HC4 = 5 5/16"
℄ HOLES
C/C HOLES
W = 20'-0"
L = 58'-10" (CONSTANT THROUGHOUT ℄ PANELS)
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. E1F SIZE 20' x 59'-2"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS TYP EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
PP1 PP2
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
1'-5 1/2"
5'-10 1/2"
3'-4"
6'-8"
6'-6"
3'-6 1/2"
4'-8 1/2"
3" x 2" x 1/4" MK A2, A3
3" x 2" x 1/4" MK A4, A8
3" x 2" x 1/4" MK A1
24T8
24T8A
24T8B
24T15
14'-4 1/2"
15'-2"
13'-11 1/2"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
COVER PLATE PLACEMENT
2'-1 1/2"
13'-4"
6'-2 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
10 3/4" OR 10 1/4"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD. (58'-10" TRUSSES ONLY)
8'-4"
1'-0"
SEE DETAIL C
11 1/4" OR 1'-0 1/2"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
TRUSS
1/4" x 2" FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
#8 SA2
V3 OR V4
A2 OR A3
DETAIL "B"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "D"
DETAIL "E"
MK. A2 3" x 2" x 1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD W.T.C. 223
PATCH PLATE PP1
DETAIL "A"
FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
COVER PLATES 26 GA. THICK
COVER PLATE E
DETAIL "F"
℄ NOTCH
END STIFFENERS
COVER PLATE A
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 1/4" x 3" EACH SIDE
DETAIL "C"
3" x 3/8" x 5" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2F | 1 | C32T2F - 59'-2" | ST 202F |
| | T3 | 2 | C32T3 - 58'-10" | ST 2[illegible] |
| | T9 | 2 | C32T9 - 58'-[illegible] | ST [illegible]9 |
| | T10 | 1 | C32T10 - 58'-[illegible] | ST [illegible] |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT [illegible]8 |
| | T8A | 1 | 24T8A - 19'-11" | BT [illegible]8A |
| | T8B | 1 | 24T8B - 19'-11" | BT [illegible]8B |
| | T15 | 1 | 24T15 - 19'-[illegible] | BT [illegible] |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 10'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-[illegible] | ST 403 |
| | [illegible] | [illegible] | [illegible] | ST 403 |
| | A8 | [illegible] | [illegible] | ST 405 |
| DIAGONAL FLATS | [illegible] | [illegible] | [illegible] x 6'-8" | [illegible] 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-[illegible] | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| ANGLE CLIP | C1 | 20 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x [illegible] | ST 40[illegible] |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2" | ST 298 |
| CONNECTION BAR | CB1 | 1 | [illegible] ϕ x [illegible]-3" | ST 400 |
| | CB2 | 6 | 1 7/8" ϕ x [illegible]-3" | ST 400 |
| | CB3 | 6 | 1 7/8" ϕ x [illegible]-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x [illegible] | ST 400 |
| | P2 | 1 | 4 1/2" x [illegible] | ST 400 |
| | P3 | 1 | 4 1/2" x [illegible] | ST 400 |
| | P5 | 3 | 4 1/2" x [illegible] x 1'-8" | ST 400 |
| | PC | 1 | 4 [illegible] x [illegible] | ST 401 |
| #8 SHEAR [illegible] | SA2 | 8 | #8 REBAR x [illegible] | [illegible] |
| PATCH PLATES | PP1 | 18 | 2" x [illegible] x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-5" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE [illegible] FULL THROAT FILLET.

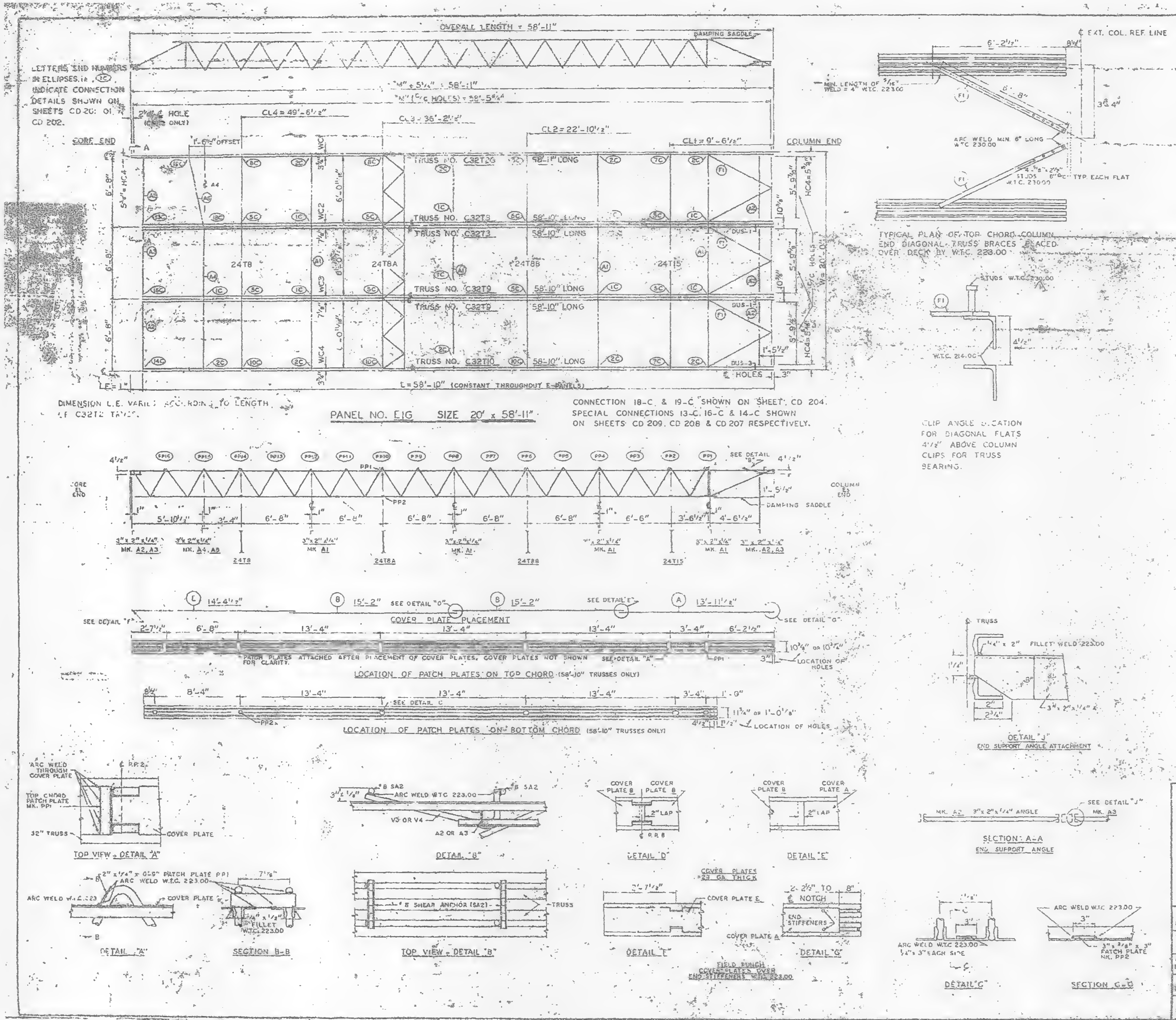
| | | | |
|---|---|---|---|
| △1 | 6-18-69 | AS NOTED | GDC |
| NO | DATE | REVISION | BY |

△1 REF. DRWGS.
7-A82-3A [illegible] 7-22-69
7-A83-11 10-15-68
7-A84-[illegible] 1-3-[illegible]
7-A84-15 & 18-39 7-22-68
7-A86-42 & 2 10-15-68
SA-124 1-6-69
7-A81-3 7-22-68
7-A81-6,7 & 8 7-22-[illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48, 70-71 (N)
PANEL E1F - [illegible]
BLDG. B FLOORS 47-48, 70-71 (WEST) △1

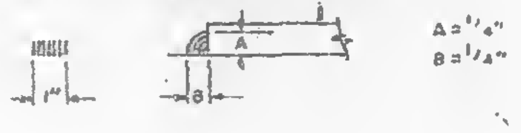
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-[illegible]
APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE [illegible]
DRAWN BY [illegible]
DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA
DATE [illegible] 1968
IN CHARGE PROD. DEV.
DETAILED BY A. CARL[illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP E1F



| REQUIRED MATERIAL PER PANEL | | | | REF. DRAW. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2G | 1 | C32T2G - 58'-11" | ST 202G |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x [illegible] | ST 403 |
| | A6 | 1 | 3" x 2" x ¼" x 6'-0¾" | ST 401 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅜" x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2 | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x 5⁄16" x 3'-8⅝" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x 5⁄16" x 3'-8⅝" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ɸ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3⁄16" ɸ x 1'-3" | ST 400 |
| | CB3 | 5 | 1⅝" ɸ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-8" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-4" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-6" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-18-69 | AS NOTED | G.P. |

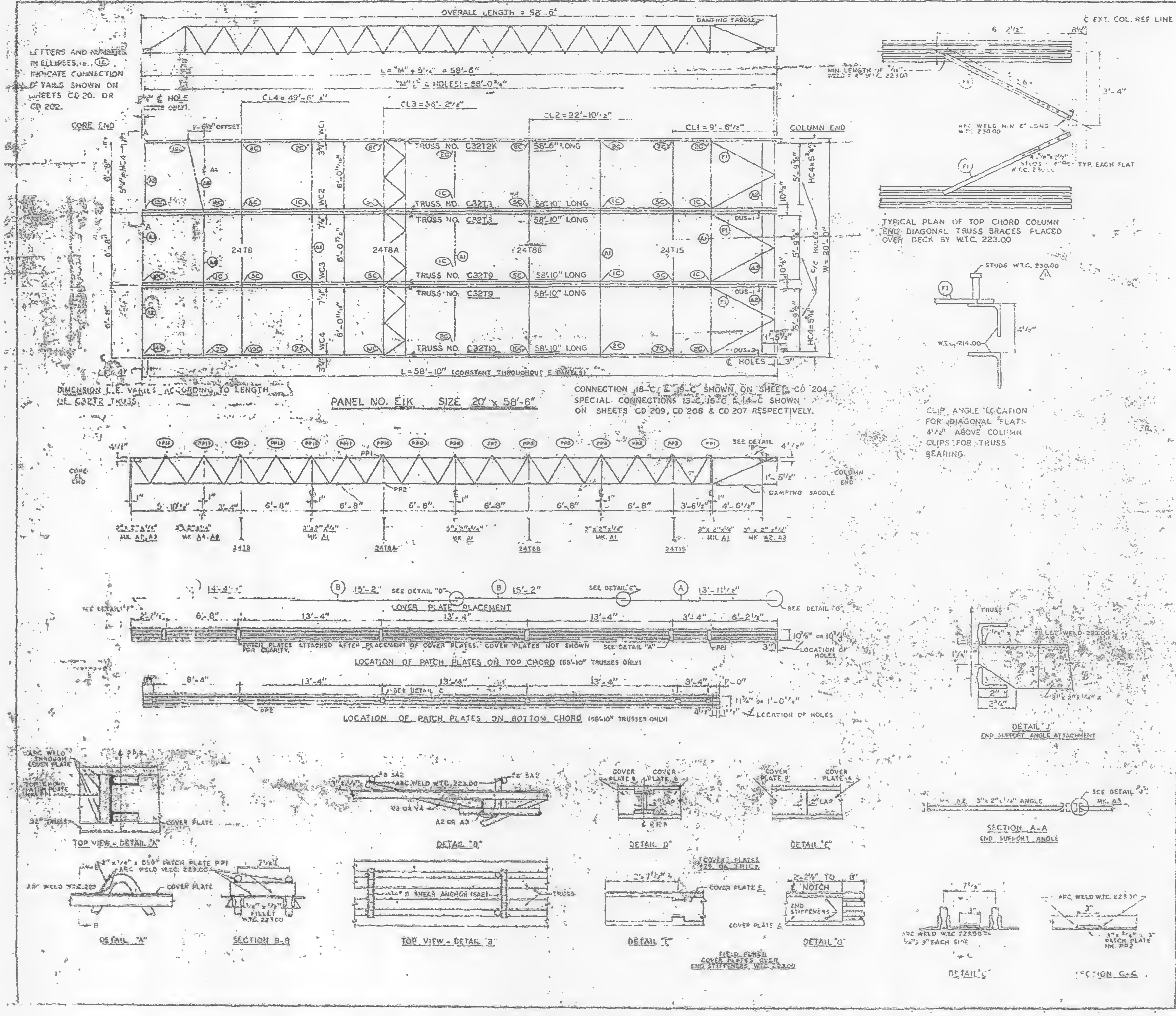
⚠1 REF. DRWGS.

| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-11 | 10-15-68 |
| 7-AB4-51 | 1-3-68 |
| 7-AB4-15 & 16, 30 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-6, 7 & 8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N&S)
PANEL E1G - 20' x 58'-11"
BLDG. B FLOORS 39-40 (EAST & WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-11
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A
DATE 1/2/69
DRAWN BY G.D.C.
DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR
DATE.
CHECKED BY T.M.CHUBA
DATE NOV. 4, 1968
IN CHARGE OF [illegible]
DETAIL [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP E1G


OVERALL LENGTH = 58'-0"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 20, OR CD 202.
L = "M" + 9¼" = 58'-6"
"M" ℄ TO ℄ HOLES = 58'-0¾"
CL4 = 49'-6½"
CL3 = 38'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T2K
58'-6" LONG
TRUSS NO. C32T3
58'-10" LONG
TRUSS NO. C32T9
58'-10" LONG
TRUSS NO. C32T10
58'-10" LONG
24T8
24T8A
24T8B
24T15
WC2
WC3
WC4
HC4
DUS-1
DUS-3
W = 20'-0"
L = 58'-10" (CONSTANT THROUGHOUT E PANELS)
℄ HOLES
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. EIK SIZE 20' x 58'-6"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 18-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
℄ EXT. COL. REF LINE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13 PP14 PP15
SEE DETAIL "B"
DAMPING SADDLE
5'-10¼" 3'-4" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-6½"
MK. A2, A3
MK. A4, A8
MK. A1
COVER PLATE PLACEMENT
14'-4" 15'-2" 15'-2" 13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
FILLET WELD 223.00
SECTION A-A
END SUPPORT ANGLE
MK. A2 3"x2"x¼" ANGLE
TOP VIEW - DETAIL "A"
DETAIL "B"
ARC WELD W.T.C. 223.00
#8 SA2
DETAIL "D"
DETAIL "E"
COVER PLATE B
COVER PLATE A
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "F"
COVER PLATES 20 GA. THICK
DETAIL "G"
NOTCH
END STIFFENERS
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "C"
SECTION C-C
ARC WELD W.T.C. 223.00
PATCH PLATE MK. PP2

| REQUIRED MATERIAL PER PANEL | | | | REF DWG |
|---|---|---|---|---|
| MATERIAL | MK | PC | SIZE | |
| FLOOR TRUSSES | T2K | 1 | C32T2K 58'-5 | ST 202K |
| | T3 | [illegible] | C32T3 - 58' | [illegible] |
| | T9 | 2 | C32T9 - 58' | ST [illegible] |
| | T10 | [illegible] | C32T10 - 58' | [illegible] |
| BRIDGING TRUSSES | T8 | [illegible] | 24T8 - 19' | ST [illegible] |
| | T8A | [illegible] | 24T8A - 19' | ST [illegible] |
| | T8B | [illegible] | 24T8B - 19' | ST [illegible] |
| | T15 | 1 | 24T15 - 19 | ST [illegible] |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x 2"x¼"x [illegible] | ST 4[illegible] |
| | A2 | 4 | 3"x 2"x¼"x 5'-1[illegible] | ST 403 |
| | A3 | 2 | 3"x 2"x¼"x 5'-1[illegible] | [illegible] |
| | A4 | 1 | 3"x 2"x¼"x [illegible] | [illegible] |
| | A8 | 1 | 3"x 2"x¼"x 6'-[illegible] | ST [illegible] |
| DIAGONAL FLATS | F4 | 6 | ½ x ¾" x 6-3 | ST 40[illegible] |
| COVER PLATES | A | 3 | 8"x 0135"x 13'-11½" | ST 303 |
| | B | 2 | 8"x 0135"x 15'-2" | ST 303 |
| | E | 3 | 8"x 0135"x 13'-4" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2"x 1½"x ¼"x 0'-8" | ST 400 |
| | C2 | 4 | 2½"x 1½"x ¼"x 8" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x [illegible] | ST 288 |
| | DUS-3 | 1 | 3½"x 3½"x [illegible] | ST 288 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-2" | ST 400 |
| | CB2 | 4 | ¾" ⌀ x 1'-3" | ST 400 |
| | CB3 | 6 | [illegible] | [illegible] |
| CONNECTION PLATES | F1 | 3 | [illegible] | ST 400 |
| | F2 | 1 | [illegible] | ST 400 |
| | P3 | 1 | 4½"x 3/8" [illegible] | ST 400 |
| | F5 | 3 | 4½"x ¼"x 1'-8" | ST 400 |
| | PC | 1 | 4½"x 3/8"x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible] | ST 4[illegible] |
| PATCH PLATES | PP1 | 16 | 3"x ¼"x 0'-9" | ST 400 |
| | PP2 | 10 | 3"x ¼"x 0'-9" | ST 400 |

(1) ALL ARC-WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

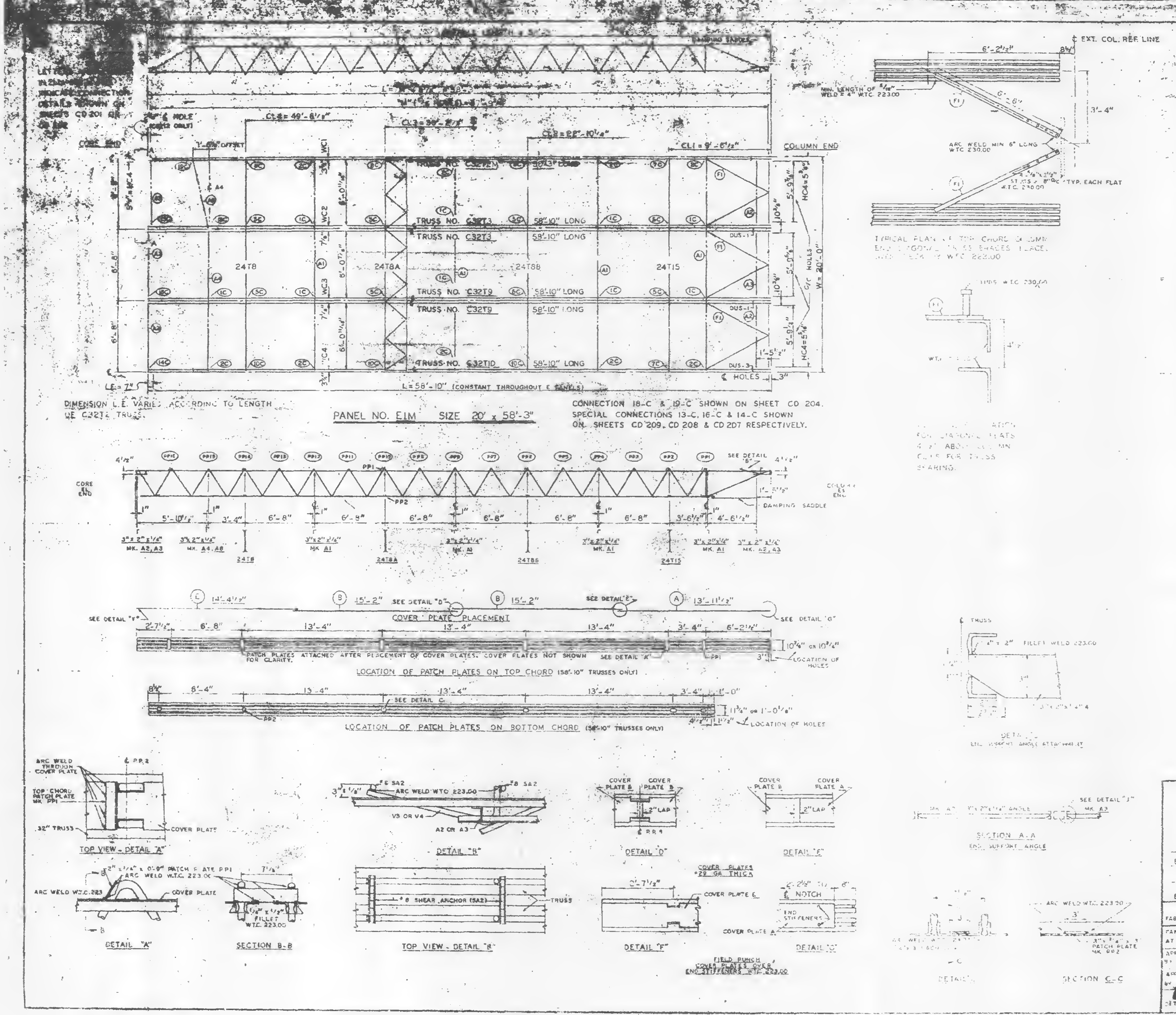
| NO. | DATE | REVISION |
|---|---|---|
| ⚠1 | 8-18-69 | AS NOTED |

⚠1 REF. DRWGS.
7-482-31 — 7-22-69
7-483-11 — [illegible]
7-484-[illegible] — [illegible]
7-484-[illegible] — [illegible]
7-484-42 & 2 — 10-3-69
[illegible] — [illegible]
[illegible] — 7-22-69
[illegible] — 7-22-69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46 (N)
PANEL EIK - 20' x 58'-6"
BLDG B FLOORS 46 (WEST) ⚠1

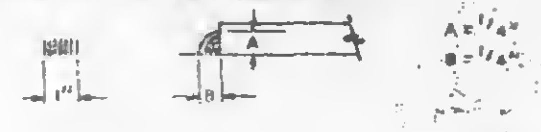
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-483-11
APPROVED FOR FABRICATION BY FOR ROBERTSON DATE 5/7/[illegible]
DRAWN BY [illegible] DATE NOV. [illegible] 1968
APPROVED FOR FABRICATION BY FOR TABLER DATE
CHECKED BY M CHURA DATE NOV. 4, 1968
FABRICATION CONT. NO. 221
DETAILED BY [illegible]
SHEET NO. FP_EIK



| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | [illegible] | DRWG. |
| FLOOR TRUSSES | T2M | 1 | C32T2M - 56'-3" | ST 202M |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x 2"x 1/4"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x 1/4"x [illegible] | ST 402 |
| | A3 | 2 | 3"x 2"x 1/4"x [illegible] | ST 403 |
| | A4 | 1 | 3"x 2"x 1/4"x 13'-3" | ST 404 |
| | A8 | 1 | 3"x 2"x 1/4"x [illegible] | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x 5/8"x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11 1/2" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135"x 14'-4 1/2" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2 1/2"x 1 1/2"x 1/4"x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2"x 1 1/2"x 1/4"x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 3/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 3/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 5 | 1 3/4" ⌀ x 1'-3" | ST 400 |
| | CB3 | 8 | 1 5/8" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2"x 3/8"x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2"x 1/2"x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2"x .39"x 6'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible] | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-9" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



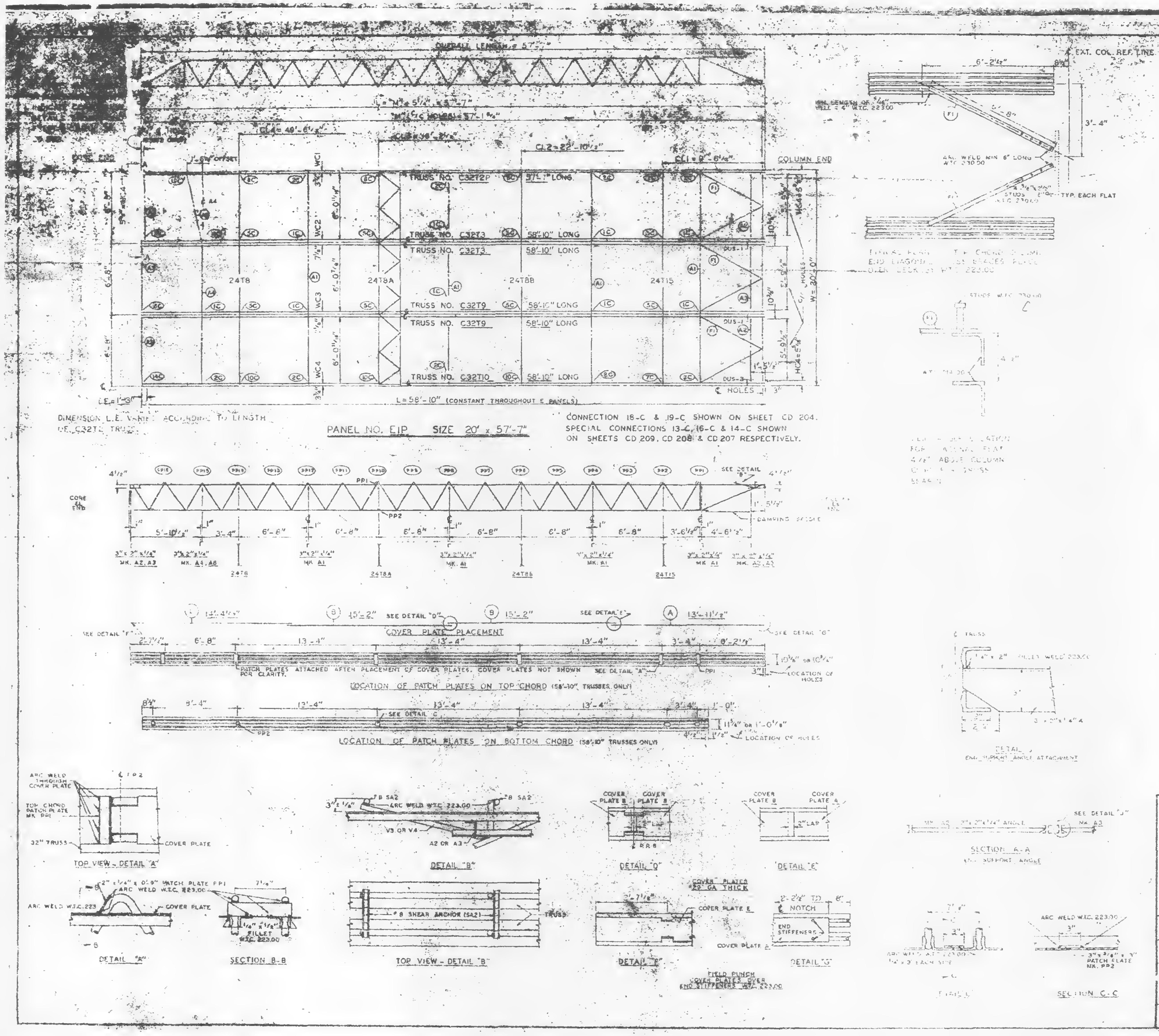
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-18-69 | AS NOTED | G.D.C. |

REF. DRWGS. ⚠1
7-AB2-3 & [illegible] 7-22-68
7-AB3-11 10-15-68
7-AB4-31 7-8-68
7-AB4-15 & 18, 38 7-22-68
7-AB4-42 & 3 10-15-68
SA-124 1-8-69
7-AB1-3 7-22-68
7-AB1-6, 7 & 8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL [illegible] 3"
BLDG. B FLOORS 72-73 (WEST) ⚠1

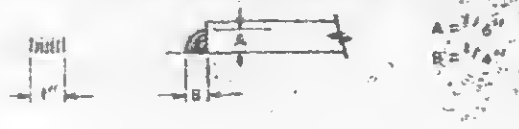
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-11
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 1/2/70
DRAWN BY G.D.C. DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M.CHURA DATE NOV. 4, 1968
LACLEDE STEEL CO.
DETAILED BY
FABRICATION CONT. NO. W.T.C. 221
E1M


OVERALL LENGTH = 57'
DAMPING SADDLE
CL4 = 49'-6 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/4"
COLUMN END
1'-0 1/2" OFFSET
WC1
WC2
WC3
WC4
TRUSS NO. C32T2P 57'-7" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
DUS-1
DUS-3
HOLES
W = 20'-0"
L = 58'-10" (CONSTANT THROUGHOUT 5 PANELS)
CE = 1'-3"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS
PANEL NO. E1P SIZE 20' x 57'-7"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
EXT. COL. REF. LINE
6'-2 1/4"
3'-4"
ARC WELD MIN 6" LONG W.T.C. 223.00
TYP. EACH FLAT
CORE END
SEE DETAIL "B"
DAMPING SADDLE
5'-10 1/2"
3'-4"
6'-8"
3'-6 1/2"
4'-6 1/2"
3" x 2" x 1/4" MK. A2, A3
3" x 2" x 1/4" MK. A4, A8
3" x 2" x 1/4" MK. A1
COVER PLATE PLACEMENT
15'-2"
13'-11 1/2"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
13'-4"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
SEE DETAIL "C"
PP1
PP2
1'-0"
DETAIL "C"
END SUPPORT ANGLE ATTACHMENT
SEE DETAIL "J"
SECTION A-A
SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
#8 SA2
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "D"
DETAIL "E"
2" x 1/4" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
DETAIL "A"
1/4" x 1 1/2" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES 22 GA THICK
COVER PLATE E
COVER PLATE E
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2'-2 1/4" T.O. NOTCH
END STIFFENERS
DETAIL "G"
ARC WELD W.T.C. 223.00
DETAIL "J"
ARC WELD W.T.C. 223.00
3" x 3/8" x 0'-3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T2P | 1 | C32T2P - 57'-7" | ST 202 |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 208 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x [illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x [illegible] | ST 403 |
| | A4 | 1 | 3" x 2" x 1/4" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x [illegible] | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 3/8" x 8'-6" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0138" x 13'-11 1/2" | ST 303 |
| | B | 5 | 9" x .0138" x 15'-2" | ST 303 |
| | C | 3 | 9" x .0138" x 14'-4 1/2" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 3/4" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-5 3/4" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/8" ϕ x 1'-5" | ST 400 |
| | CB3 | 6 | 1 3/8" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | F1 | 5 | 3 1/2" x 3/8" x 6 1/2" | ST 400 |
| | F2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | F3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | F5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | PF | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-4" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. HOGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



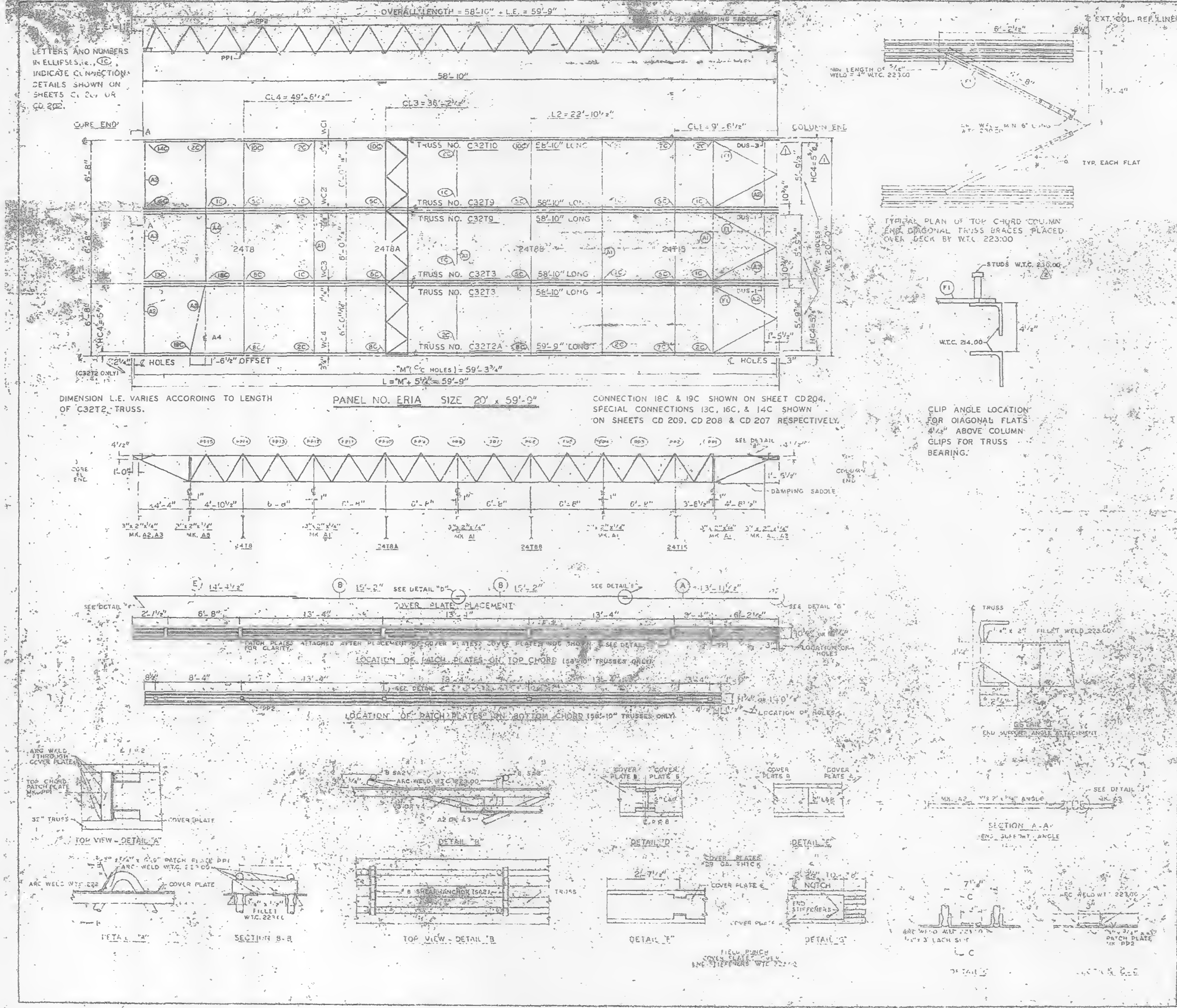
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 8-18-69 | AS NOTED | G.C.C. |

REF. DRWGS.
7-AB2-3 & 10 7-22-68
7-AB3-11 10-18-68
7-AB4-3 [illegible]
7-AB4-15 & 16, 20 7-[illegible]
7-AB4-48 & 3 [illegible]
SA-124 1-8-69
7-AB1-3 [illegible]
7-AB1-6, 7 & 8 7-[illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER — N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N)
PANEL SIZE
BLDG. B FLOORS 74 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB2-11
APPROVED FOR FABRICATION FOR P.N.Y.A. DATE 1/2/70
DRAWN BY G.C.C. DATE NOV. 1 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.MICHURA DATE NOV. 4 1968
IN CHARGE OF
DETAILED BY A CARL WEBER
FABRICATION CONT. NO. W.T.C. 221


OVERALL LENGTH = 58'-10" + L.E. = 59'-9"
L.E.
PP2
PP1
DAMPING SADDLE
58'-10"
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
L2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2A 59'-9" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
DUS-3
DUS-1
HC4 = 5 5/8"
W = 20'-10"
C/C HOLES
℄ HOLES
1'-6 1/2" OFFSET
(C32T2 ONLY)
"M" (C/C HOLES) = 59'-3 3/4"
L = "M" + 5 1/4" = 59'-9"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. ERIA SIZE 20' x 59'-9"
CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
6'-2 1/2"
8 1/2"
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
3'-4"
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "A"
CORE END
COLUMN END
DAMPING SADDLE
4 1/2"
1'-0"
1'-5 1/2"
4'-4"
4'-10 1/2"
6'-8"
3'-6 1/2"
4'-8 1/2"
MK. A2, A3
MK. A3
MK. A1
24T8
24T8A
24T8B
24T15
14'-4 1/2"
15'-2"
13'-11 1/2"
SEE DETAIL "D"
SEE DETAIL "E"
COVER PLATE PLACEMENT
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
8'-4"
13'-4"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
TRUSS
1/4" x 2" FILLET WELD 223.00
DETAIL "C"
END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
A2 OR A3
DETAIL "B"
COVER PLATE
DETAIL "D"
DETAIL "E"
MK. A2
MK. A3
SECTION A-A
END SUPPORT ANGLE
PATCH PLATE PP1
ARC WELD W.T.C. 223.00
COVER PLATE
FILLET W.T.C. 223.00
DETAIL "F"
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES 9 GA. THICK
COVER PLATE
DETAIL "F"
NOTCH
END STIFFENERS
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00
C
C
DETAIL "C"
SECTION C-C
PATCH PLATE MK. PP2

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | DRWG |
| FLOOR TRUSSES | T2A | 1 | C32T2A - 59'-9" | ST 202A |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-10" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-1 7/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 5/8" | [illegible] |
| | A4 | 1 | 3" x 2" x 1/4" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-9 5/8" | ST 405 |
| DIAGONAL FLATS | F1 | [illegible] | 1 1/2" x 5/8" x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 203 |
| | B | [illegible] | 9" x .0135" x 15'-2" | [illegible] |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 203 |
| ANGLE CLIPS | C1 | 20 | 2 1/2" x 2 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2" x 2 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 1/4" x 3'-6 3/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 1/4" x 3'-6 3/4" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 1/4" ⌀ x 1'-3" | ST 400A |
| | CB7 | 6 | [illegible] | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 5/8" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-8" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

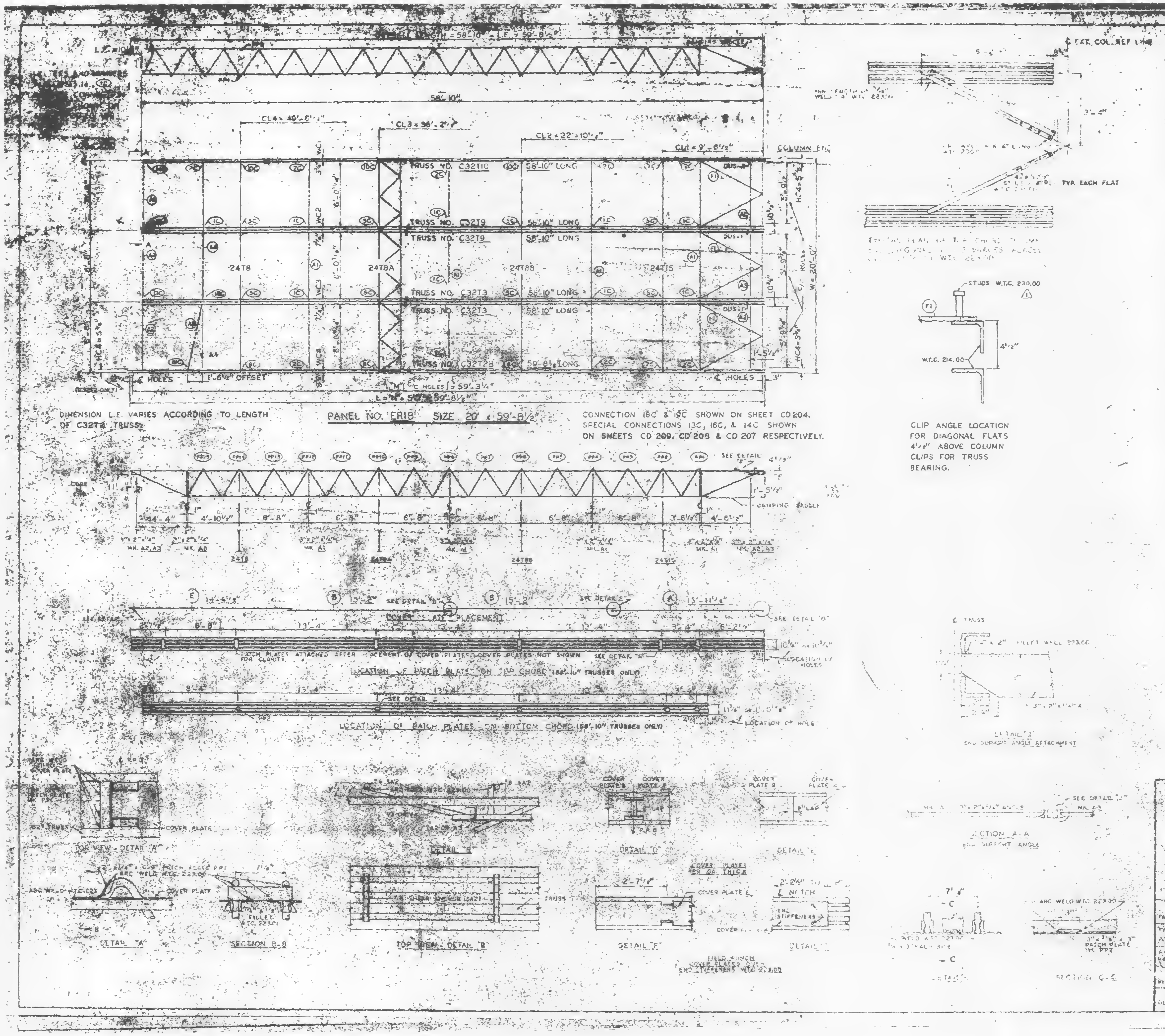
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 6-19-69 | AS NOTED | J.D.C. |
| 1 | 9-19-68 | AS NOTED | T.M.C. |

2 REF. DRWGS.
7-AB2-7 & 10 7-22-68
7-AB3-12 10-15-68
7-AB4-2, 3.7 [illegible]-68
7-AB4-5, 16 & 38 7-22-68
7-AB4-42 & [illegible] 10-15-68
5A-124 [illegible]-6-69
7-AB1-3 7-22-68
7-AB1-6, 7 & 8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH), 49-59, 60-66, 68, 69 (NORTH) PANEL ERIA
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-5[illegible]

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. [illegible]
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
DRAWN BY D.G.C. DATE JULY 22, 1968
CHECKED BY T.M.CHURA DATE JULY 22, 1968
FABRICATION CONT. NO. W.T.C. 221
ER ERIA



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

CONNECTION 18C & 19C SHOWN ON SHEET CD204.
SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN
ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4½" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T2B | 1 | C32T2B - 59'-8½" | ST 202B |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 18'-11" | ST 208 |
| | T8A | 1 | 24T8A - 18'-11" | ST 208A |
| | T8B | 1 | 24T8B - 18'-11" | ST 208B |
| | T15 | 1 | 24T15 - 12'-11" | ST 215 |
| 3"x 2"x¼" ANGLE | A1 | 6 | 3"x 2"x¼"x 16'-10" | ST 403 |
| | A2 | 4 | 3"x 2"x¼"x 5'-11⅛" | ST 403 |
| | A3 | 2 | 3"x 2"x¼"x 5'-11⅛" | ST 403 |
| | A4 | 1 | 3"x2"x¼"x [illegible]-3" | ST 403 |
| | A8 | 1 | 3"x 2"x¼"x [illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1½"x ⅜"x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | E | 3 | 8"x .0135"x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | [illegible] x 0'-8" | ST 400 |
| | C2 | 4 | [illegible] x 4" | ST 401 |
| DAMPING SADDLE | DUS-2 | 2 | [illegible] | ST 298 |
| | DUS-3 | 1 | [illegible] | ST 298 |
| CONNECTION BAR | CB1 | [illegible] | [illegible] 1'-3" | ST 400 |
| | CB2 | 5 | [illegible] | ST 400 |
| | CB3 | 6 | [illegible] | ST 400 |
| CONNECTION PLATES | P1 | 5 | [illegible] | ST 400 |
| | P2 | [illegible] | 4½"x .39"x 0'-8" | ST 400 |
| | P3 | 16 | 4½"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4½"x ¼"x 0'-6" | ST 400 |
| | P8 | 1 | 4½"x .39"x 0'-6" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x ¼"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x ⅜"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. (OGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 3" FULL THROAT FILLET.

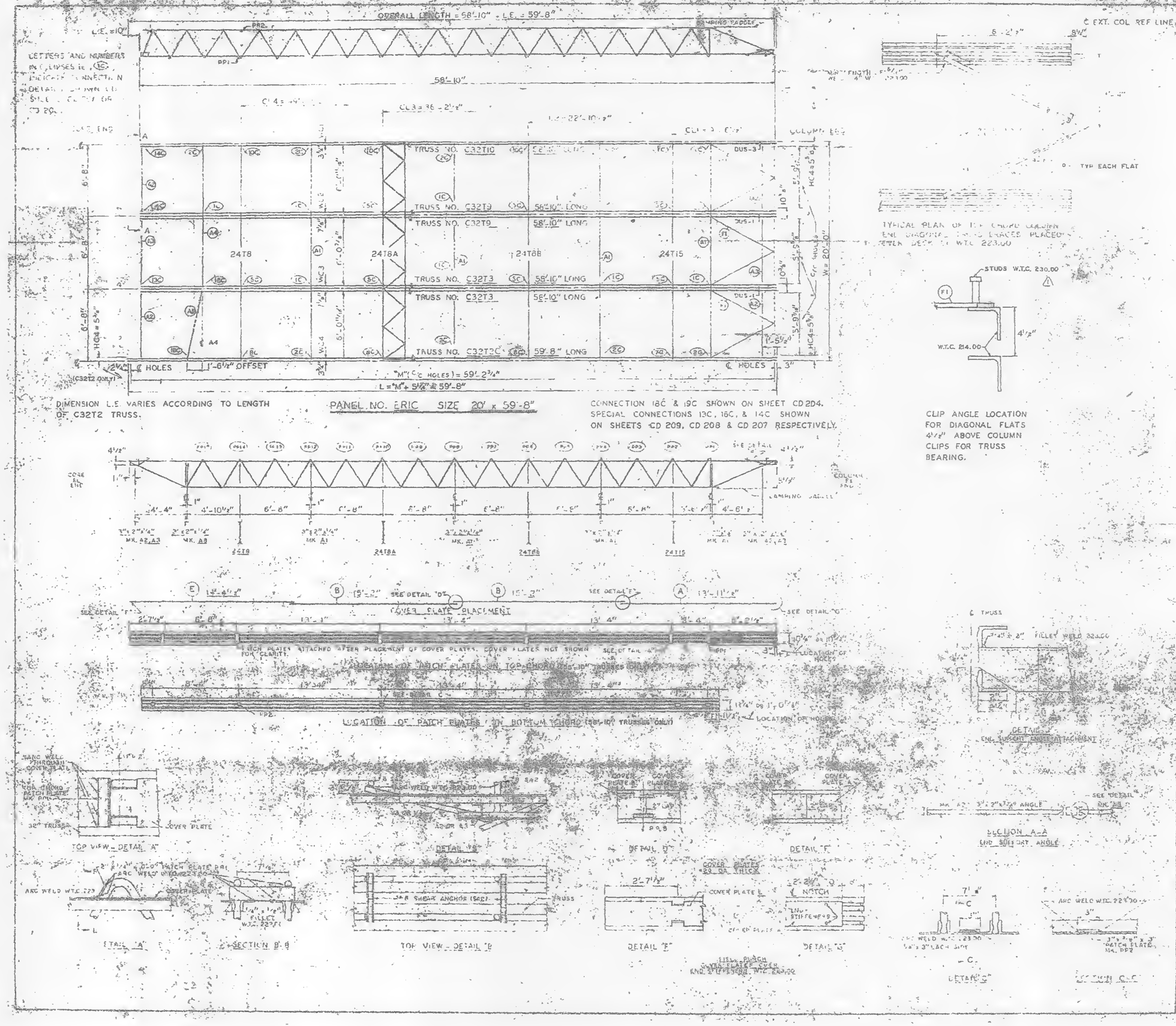
| NO. | DATE | REVISION |
|---|---|---|
| 1 | 6-19-69 | AS NOTED |

REF. DRWGS.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 84-91, 93-106 (N)
PANEL ERIB 20' x 59'-8½"
BLDG. B FLOORS 84-91, 93-106 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY FOR PONYA
DATE 2/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE
DESIGN DRAWING NO.
DRAWN BY
DATE NOV. 4
CHECKED BY
DATE NOV. 5
LACLEDE STEEL CO.
DETAILED BY
FABRICATION CONTRACT W.T.C. 221
ERIB



LETTERS AND NUMBERS IN ELLIPSES i.e. (13C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 204.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIC SIZE 20' x 59'-8"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL FLATS BRACES PLACED BETWEEN DECK AT W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | [illegible] |
| FLOOR TRUSSES | 12C | 1 | C32T2C - 59'-8" | [illegible] |
| | 13 | 2 | C32T3 - 58'-10" | ST 203 |
| | 19 | 2 | C32T9 - 58'-10" | [illegible] |
| | 110 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | 18 | 1 | 24T8 [illegible] | ST 208 |
| | 18A | 1 | 24T8A [illegible] | ST 208A |
| | 18B | 1 | 24T8B [illegible] | ST 208B |
| | 715 | 1 | 24T15 [illegible] | ST 215 |
| 3" x 2" x ¼" ANGLE | [illegible] | [illegible] | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | [illegible] |
| | A3 | 2 | [illegible] | [illegible] |
| | A4 | 1 | 3" x 2" x ¼" x 3'-2" | ST 403 |
| | A8 | 1 | [illegible] | [illegible] |
| DIAGONAL FLAT | F1 | 1 | 1½" x ⅝" x 8'-6" | ST 402 |
| [illegible] | A | 3 | [illegible] x .0135" [illegible] | [illegible] |
| | B | 6 | 4" x .0135" x 15'-[illegible] | [illegible] |
| | E | 3 | 5" x .0135" x 14'-4½" | [illegible] |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-6" | ST 40[illegible] |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 40[illegible] |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x [illegible] x 3'-5¼" | ST 356 |
| | DUS-3 | 1 | 3½" x [illegible] x 3'-0 [illegible] | [illegible] |
| CONNECTION BAR | CB1 | 1 | [illegible] Ø x 3" | ST 400 |
| | CB2 | [illegible] | [illegible] Ø x 1'-3" | ST 400 |
| | CB7 | 6 | ⅝" Ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x [illegible] 0" | ST 400 |
| | P5 | 3 | 4½" x [illegible] 6 | ST 400 |
| | P8 | 1 | 4½" x .30" x 0'-9" | ST 40[illegible] |
| ⅝ SHEAR ANCHOR | SA2 | 6 | ⅝ [illegible] x 0'-[illegible] | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-9" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO. | DATE | REVISION | |
|---|---|---|---|
| 1 | 6-19-69 | AS NOTED | G.D.C. |

1 REF. DRWGS.
- 7-A[illegible]-33,10 — 7-22-68
- 7-A83-12 — 10-15-68
- 7-A84-31 — [illegible]-3-68
- 7-A84-15,16 & 30 — 7-22-68
- 7-A84-47 & 3 — 10-[illegible]-68
- 5A-24 — 1-6-69
- 7-A81-3 — 7-22-68
- 7-A81-6,7 & 9 — 7-22-68

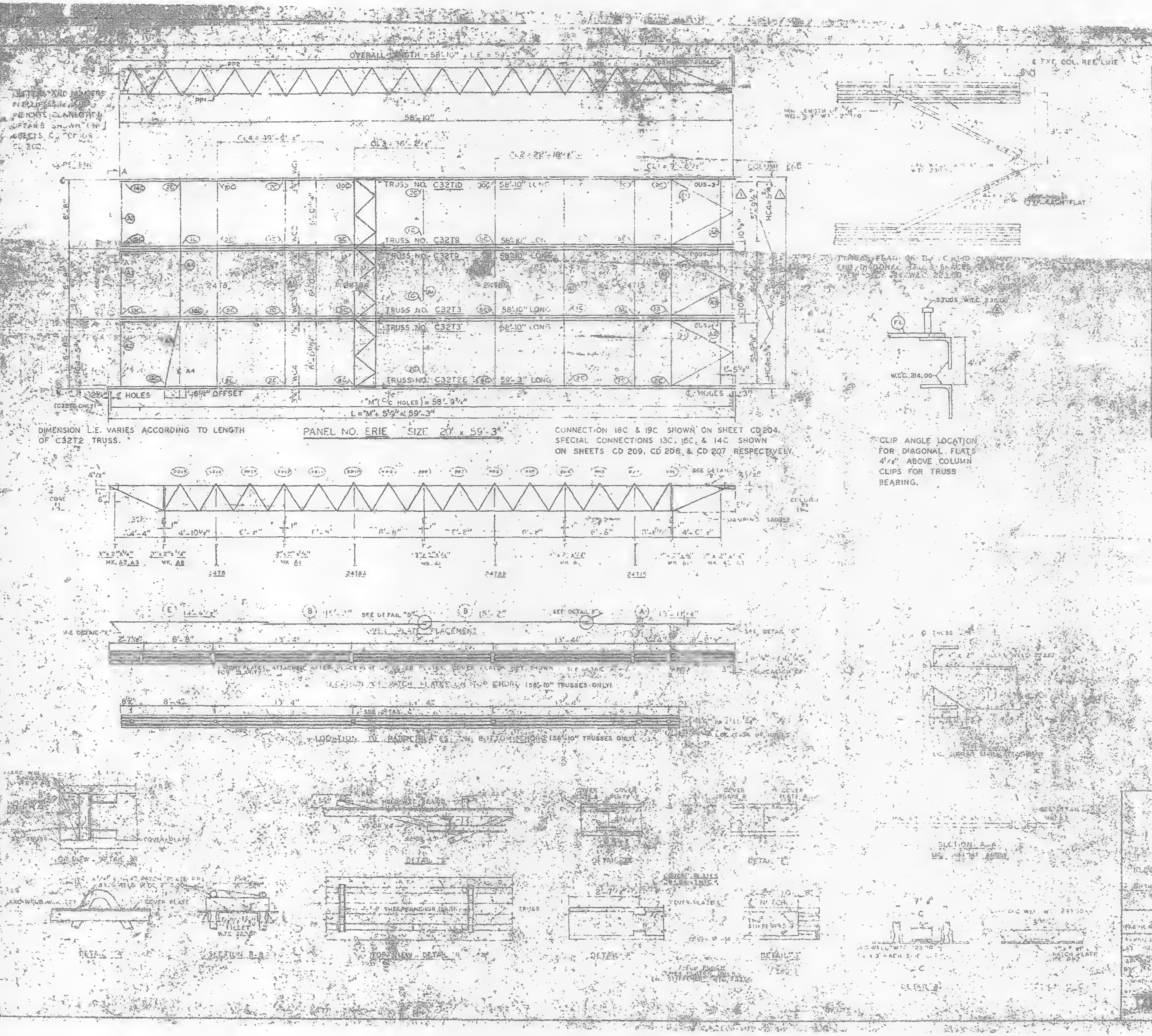
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER [illegible]
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 50-58, 60-66, 68-74, 80-91, 93-106 (S)

PANEL ERIC [illegible] 59'-8

BLDG. B FLOORS 50-58, 60-74, 80-91, 93-106 (S)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A63-12
APPROVED FOR FABRICATION BY [illegible] FOR [illegible] DATE [illegible]
DRAWN BY [illegible] DATE NOV [illegible] 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
CHECKED BY [illegible] DATE NOV 5 1968
LACLEDE STEEL CO.
FABRICATOR CONTRACT NO. [illegible]
DETAILED BY A CARL WEBER
PP ERIC



MATCH MARKS AND NUMBERS IN ELLIPSES REFER TO CONNECTION DETAILS SHOWN ON SHEETS CD [illegible] CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIE SIZE 20' x 59'-3"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| [illegible] MATERIAL [illegible] | | | | |
|---|---|---|---|---|
| MATERIAL | MK. | NO. | SIZE | DWG. |
| FLOOR TRUSSES | T2E | 1 | C32T2E - 59'-3" | ST 202E |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x2"x¼"x19'-1½" | ST 403 |
| | A2 | 4 | 3"x2"x¼"x5'-11¼" | ST 404 |
| | A3 | 2 | 3"x2"x¼"x5'-3" | ST 403 |
| | A4 | 1 | 3"x2"x¼"x13'-3" | ST 403 |
| | A8 | 1 | 3"x2"x¼"x6'-8⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 2 | 1½"x⅝"x6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x.0135"x13'-1½" | ST 303 |
| | B | 2 | 9"x.0135"x15'-2" | ST 303 |
| | E | 3 | 9"x.0135"x14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2½"x2½"x¼"x0'-5" | ST 401 |
| | C2 | 4 | 2½"x1½"x¼"x0'-6" | ST 400 |
| DAMPING SADDLE | DUS-4 | 2 | [illegible] | ST 298 |
| | DUS-3 | 1 | [illegible] | ST 298 |
| CONNECTION BAR | CB1 | 1 | [illegible] | ST 406 |
| | CB2 | 6 | ¾"Ø x 1'-7" | ST 406 |
| | CB7 | 6 | [illegible] x 1'-5" | ST 406 |
| CONNECTION PLATES | P1 | 8 | 3½"x⅜"x0'-8½" | ST 400 |
| | P2 | 4 | 4"x.393"x0'-6" | ST 401 |
| | P3 | [illegible] | [illegible] x1'-0" | ST 400 |
| | P5 | 3 | [illegible] | ST 400 |
| | P6 | 1 | 4½"x.393"x0'-8" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x¼"x0'-9" | ST 400 |
| | PP2 | 18 | 3"x⅜"x0'-9" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

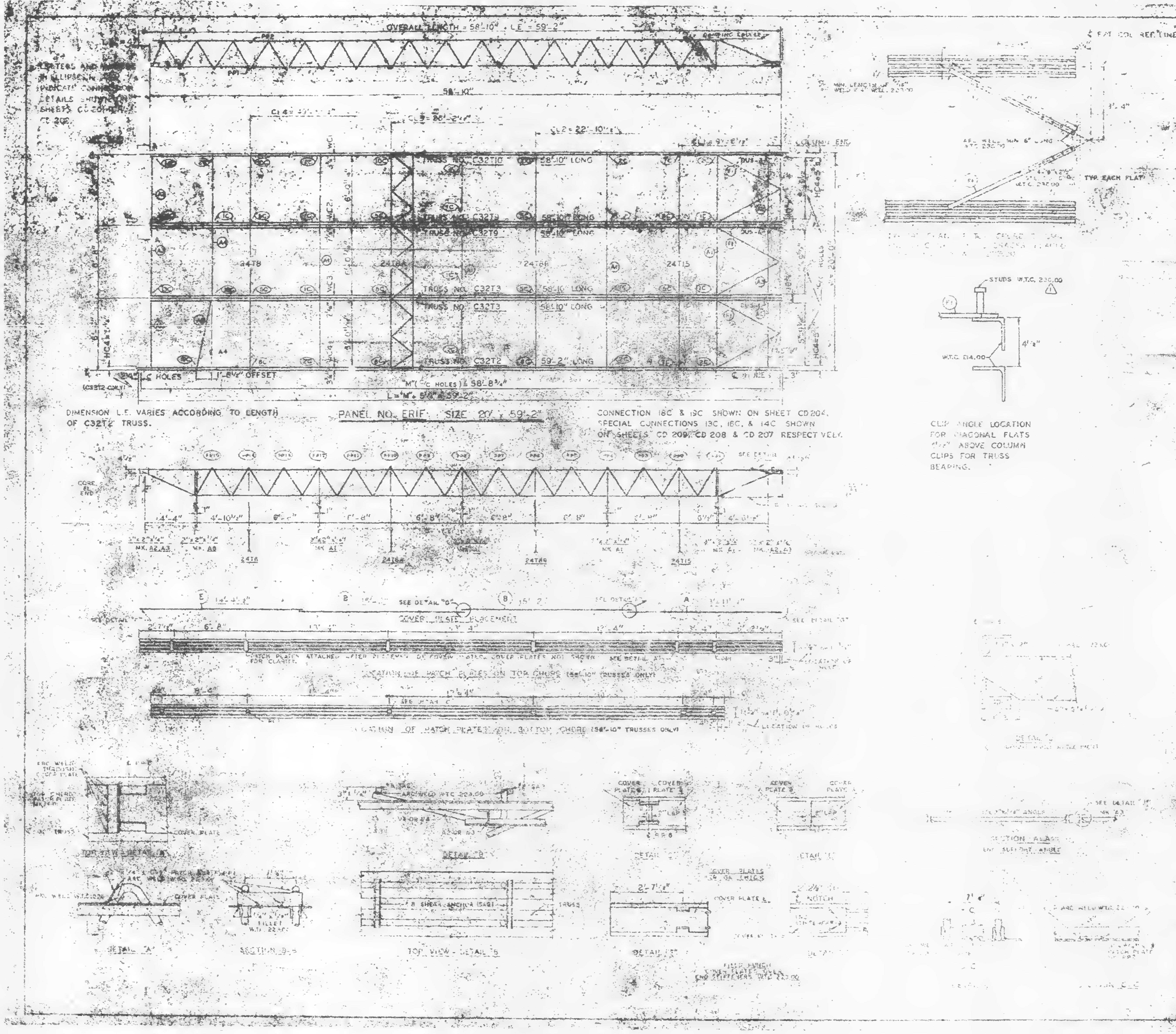
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ½" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 6-19-69 | AS NOTED | G.O.C. |
| 1 | 9-19-68 | AS NOTED | T.M.C. |

2 - REF. DWGS.

| | |
|---|---|
| 7-332-3 & 10 | 7-22-68 |
| 7-493-12 | 10-15-68 |
| 7-384 [illegible] | [illegible] |
| 7-384-15, 16 & 59 | 7-22-68 |
| 7-386-42 & 3 | 10-15-68 |
| SA-124 | 1-6-58 |
| 9-AB1-3 | 7-22-68 |
| 7-AB1-5, 7 & 8 | 7-22-68 |

FLOOR PANEL [illegible]
WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY
BLDG. [illegible] FLOORS 10-11 (SOUTH)
[illegible] PANEL ERIE
FABRICATION BY ... LACLEDE STEEL COMPANY
DESIGN DRAWING NO. 7-AB-12
CHECKED BY [illegible]
FABRICATION [illegible]
ERIE


OVERALL LENGTH = 58'-10" L.E. = 59'-2"
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 - CD 202
58'-10"
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2 59'-2" LONG
24T8
24T8A
24T8B
24T15
COLUMN LINE
1'-8¼" OFFSET
M"(C HOLES) = 58'-8¾"
L = M + 5⅝" = 59'-2"
PANEL NO. ERIF SIZE 20' x 59'-2"
CORE EL. END
4'-4"
4'-10½"
6'-8"
3"x2"x¼" MK. A2, A3
3"x2"x¼" MK. A5
3"x2"x¼" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "C"
SEE DETAIL "E"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES (COVER PLATES NOT SHOWN FOR CLARITY)
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
LOCATION OF HOLES
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "E"
#8 SHEAR ANCHOR (SA2)
COVER PLATE
TRUSS
FIELD WELD W.T.C. 220.00
FILLET
COVER PLATE E
2'-7½"
ARC WELD W.T.C. 220.00
FIELD FINISH COVER PLATES AND END STIFFENERS W.T.C. 220.00
MIN. LENGTH OF ½" WELD W.T.C. 220.00
ARC WELD MIN 6" LONG W.T.C. 220.00
TYP. EACH FLAT
C EXT. COL. REF. LINE
STUDS W.T.C. 220.00
W.T.C. 214.00
4½"
SECTION A-A
SEE DETAIL

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 1½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | SHOP DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T2F | 1 | C32T2F - 59'-2" | ST 202F |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | [illegible] - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | [illegible] | 24T8 [illegible] | [illegible] |
| | T8A | [illegible] | 24T8A [illegible] | [illegible] |
| | T8B | [illegible] | [illegible] | [illegible] |
| | 15 | [illegible] | [illegible] | [illegible] |
| 3"x2"x¼" ANGLE | A1 | 4 | [illegible] | [illegible] |
| | A2 | [illegible] | [illegible] | [illegible] |
| | A3 | [illegible] | [illegible] | [illegible] |
| | A5 | [illegible] | 3"x2"x¼" [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | [illegible] | [illegible] | [illegible] |
| COVER PLATES | A | [illegible] | [illegible] | [illegible] |
| | B | [illegible] | [illegible] | [illegible] |
| | E | [illegible] | [illegible] x 14'-4" | ST 303 |
| ANGLE CLIPS | [illegible] | [illegible] | [illegible] | ST 400 |
| | C2 | [illegible] | [illegible] | ST 400 |
| DAMPING SADDLES | DUS 2 | [illegible] | [illegible] | [illegible] |
| | DUS 3 | [illegible] | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | [illegible] | [illegible] | [illegible] |
| | CB2 | [illegible] | [illegible] | [illegible] |
| | CB3 | 3 | [illegible] | [illegible] |
| CONNECTION PLATES | P1 | [illegible] | 3"x[illegible]x6'-[illegible] | [illegible] |
| | P2 | 1 | 4½" x .39" x 6'-2" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | [illegible] | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2½" x ⅛" x 0'-6" | ST 400 |
| | PP2 | 18 | 3" x ⅛" x 0'-3" | ST 400 |

(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

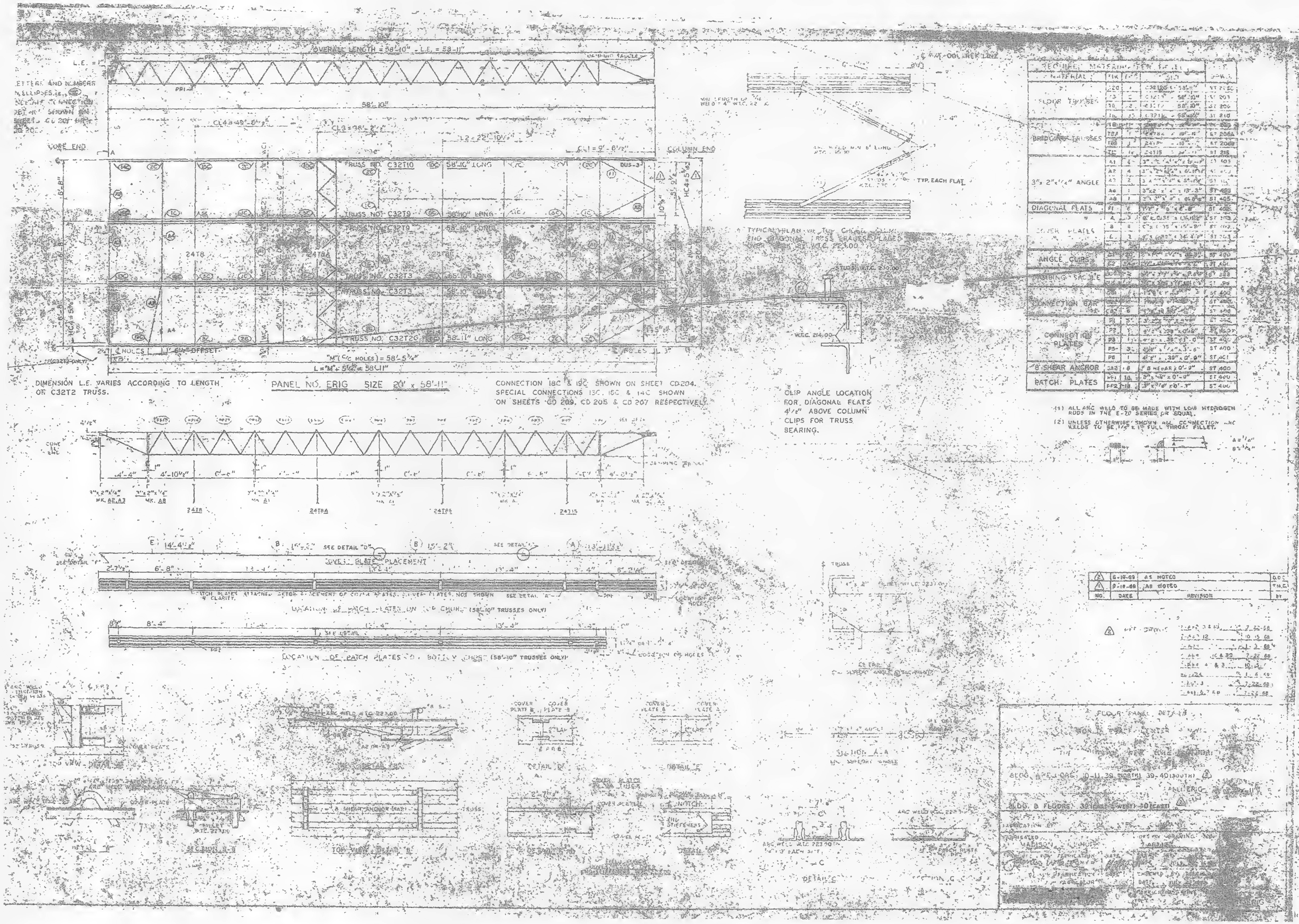
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/8" x 1" FULL THROAT FILLETS.

| NO. | DATE | REVISION |
|---|---|---|
| 1 | 6-19-69 | AS NOTED |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
[illegible]
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48, 70-71 (N)
PANEL ERIF
BLDG. B FLOORS 47-48, 70-71 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DRAWN BY [illegible] DATE NOV 4
CHECKED [illegible] DATE NOV 5
DETAILED BY [illegible]


OVERALL LENGTH = 58'-10" - L.E. = 58'-11"
L.E. = 1"
58'-10"
CL4 = 49'-6½"
CL3 = 38'-2½"
L2 = 22'-10½"
CL1 = 9'-8½"
CORE END
COLUMN END
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2G 58'-11" LONG
24T8
24T8A
24T8B
24T15
HC4
"M" (C/C HOLES) = 58'-5¾"
L = "M" + 5¼" = 58'-11"
6¾" OFFSET
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. ERIG SIZE 20' x 58'-11"
CONNECTION 18C & 19C SHOWN ON SHEET CD204.
SPECIAL CONNECTIONS 13C, 16C & 14C SHOWN ON SHEETS CD 209, CD 205 & CD 207 RESPECTIVELY.
LETTERS AND NUMBERS IN ELLIPSES i.e. (18C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 THRU CD 207.
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD SHOWING DIAGONAL TRUSS BRACES PLACED
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
4'-4"
4'-10½"
6'-6"
3"x2"x¼" MK. A2, A3
3"x2"x¼" MK. A8
24T8
24T8A
24T8B
24T15
DAMPING SADDLE
14'-4½"
15'-3"
15'-2"
13'-11½"
SEE DETAIL "D"
SEE DETAIL "F"
COVER PLATE PLACEMENT
2'-7½"
6'-8"
13'-4"
6'-2½"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
8'-4"
13'-4"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
TRUSS
DETAIL
SUPPORT ANGLE ATTACHMENT
COVER PLATE
TOP VIEW DETAIL
ARC WELD W.T.C. 223.00
DETAIL
COVER PLATE B
COVER PLATE B
DETAIL "D"
DETAIL "E"
SECTION A-A
SECTION B-B
#8 SHEAR ANCHOR
TOP VIEW DETAIL "B"
NOTCH
STIFFENERS
DETAIL "C"
SECTION C-C
ARC WELD W.T.C. 223.00

| REQUIRED MATERIAL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | REQ'D | SIZE | SPEC. |
| FLOOR TRUSSES | 2G | 1 | C32T2G - 58'-11" | ST 202 |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 206 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | [illegible] | [illegible] | [illegible] |
| | T8A | 1 | 24T8A - 19'-8" | ST 206A |
| | T8B | 1 | 24T8B - 19'-[illegible] | ST 206B |
| | T15 | [illegible] | 24T15 - [illegible] | ST 215 |
| 3"x 2"x ¼" ANGLE | A1 | [illegible] | [illegible] | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | 2 | [illegible] | ST 403 |
| | A4 | 1 | 3"x2"x¼" x 13'-3" | ST 403 |
| | A8 | 1 | [illegible] | ST 405 |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST 402 |
| COVER PLATES | A | [illegible] | [illegible] | ST 403 |
| | B | 8 | [illegible] x 15'-2" | ST 403 |
| | E | 3 | [illegible] x 14'-4½" | ST 403 |
| ANGLE CLIPS | C1 | 20 | [illegible] | ST 400 |
| | C2 | [illegible] | [illegible] | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | ST 288 |
| | [illegible] | [illegible] | [illegible] | ST [illegible] |
| CONNECTION BAR | CB1 | [illegible] | [illegible] | ST 400 |
| | CB2 | [illegible] | [illegible] | ST 400 |
| | CB3 | 6 | [illegible] | ST 400 |
| CONNECTION PLATES | P1 | 3 | [illegible] | ST [illegible] |
| | P2 | 1 | [illegible] x .39" x 0'-8" | ST 400 |
| | P3 | [illegible] | [illegible] x .39" x 1'-0" | ST 400 |
| | P5 | 3 | [illegible] | ST 400 |
| | P6 | 1 | 4"x" x .39" x 0'-8" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 3"x [illegible] x 0'-0" | ST 400 |
| | PP2 | 18 | 3"x [illegible] x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"

| NO. | DATE | REVISION | |
|---|---|---|---|
| 2 | 6-19-69 | AS NOTED | D.O.C. |
| 1 | 9-18-68 | AS NOTED | T.N.C. |

FLOOR PANEL DETAILS

WORLD TRADE CENTER

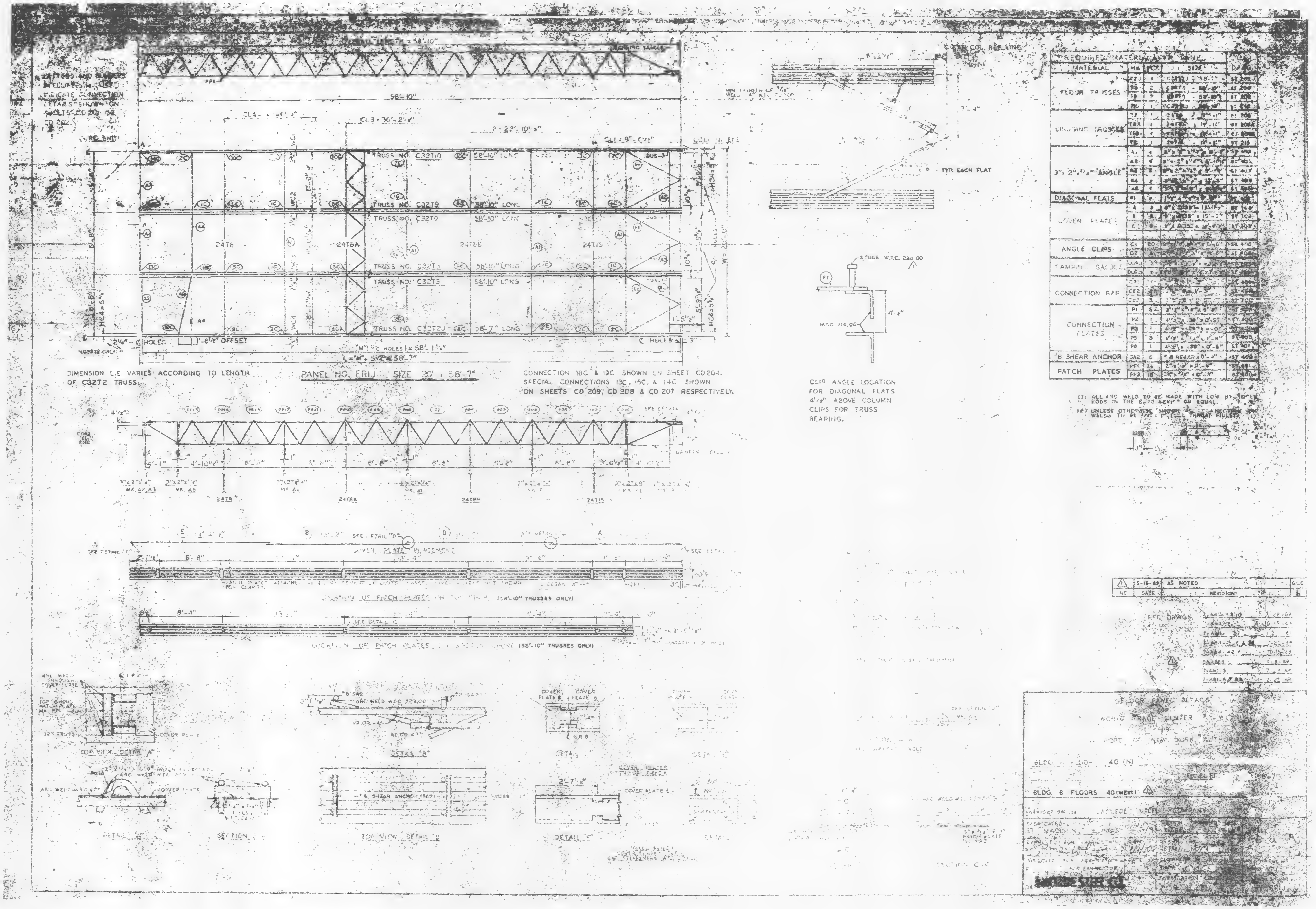
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11, 39 (NORTH) 39-40 (SOUTH) 2

PANEL ERIG

BLDG. B FLOORS 39 (CORE & WEST) 30 (EAST) 1

FABRICATED AT MADISON, ILLINOIS



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIJ SIZE 20' x 58'-7"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | DWG |
| FLOOR TRUSSES | 2J | 1 | C32T2J x 58'-7" | ST 202J |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | ST 208 |
| | T8A | 1 | 24T8A x 19'-11" | ST 208A |
| | T8B | 1 | 24T8B x 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x 5/16" ANGLE | A1 | 4 | [illegible] | ST 400 |
| | A2 | 4 | [illegible] | ST 402 |
| | A3 | 2 | [illegible] | ST 403 |
| | A4 | 2 | [illegible] x 12'-3" | ST 403 |
| | A5 | 1 | [illegible] | ST [illegible] |
| DIAGONAL FLATS | F1 | 6 | [illegible] | ST [illegible] |
| COVER PLATES | A | 3 | [illegible] x 13'-11" | ST 308 |
| | B | 4 | [illegible] x 15'-2" | ST 302 |
| | E | 3 | [illegible] x 12'-4" | ST 305 |
| ANGLE CLIPS | C1 | 20 | [illegible] | ST 410 |
| | C2 | [illegible] | [illegible] | ST 40[illegible] |
| CAMBERING SADDLE | DUS-2 | 2 | [illegible] | ST [illegible] |
| | DUS-3 | 6 | [illegible] | ST [illegible] |
| CONNECTION BAR | CB1 | [illegible] | [illegible] | ST 400 |
| | CB2 | [illegible] | [illegible] | ST [illegible] |
| | CB3 | 3 | [illegible] | ST [illegible] |
| CONNECTION PLATES | P1 | 52 | [illegible] | ST [illegible] |
| | P2 | 1 | 4 1/2" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x .38" x 0'-[illegible] | ST [illegible] |
| | P5 | 3 | 4 1/2" x [illegible] x 1'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x .38" x 0'-8" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-4" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x [illegible] x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x [illegible] x 0'-[illegible] | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

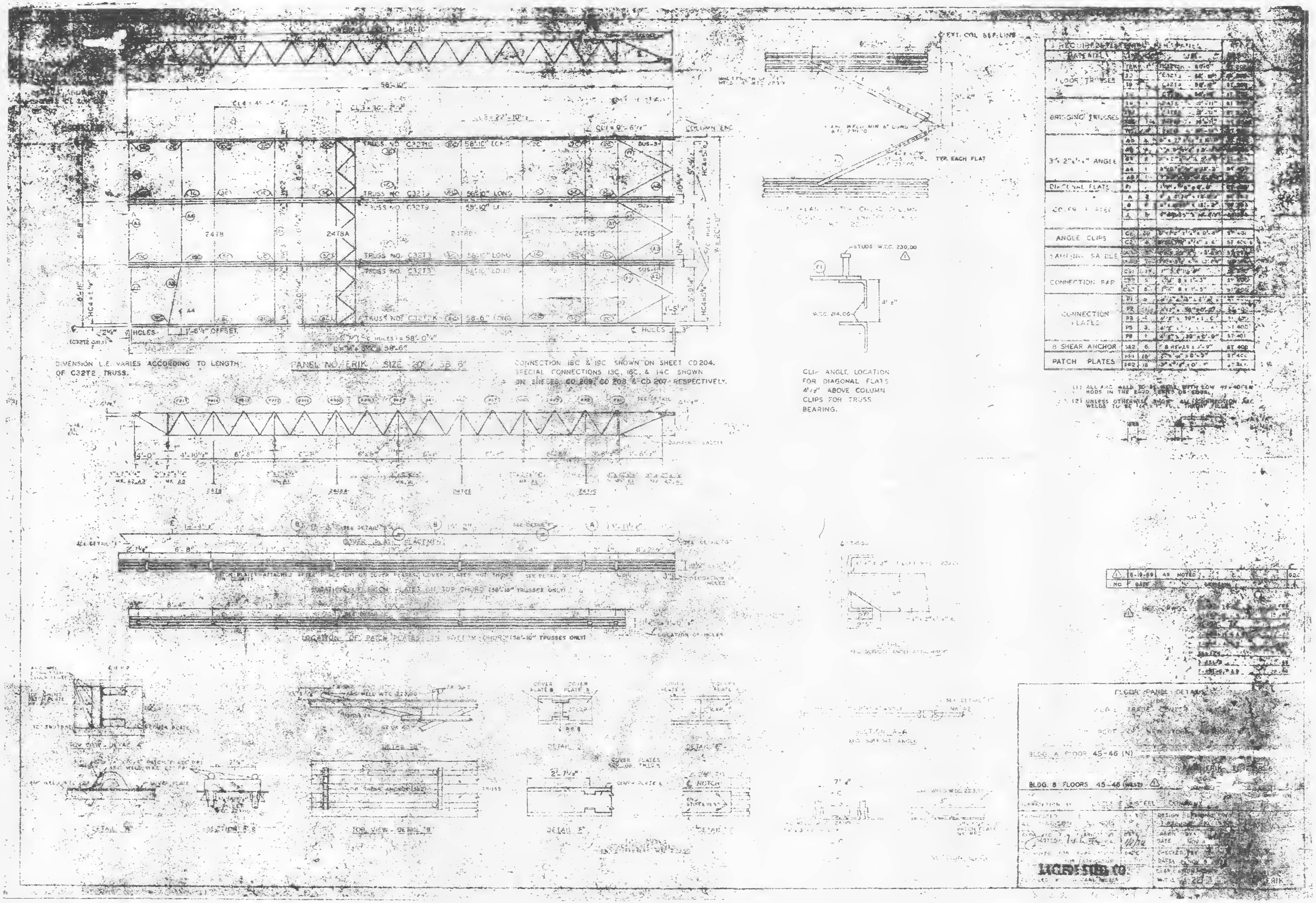
| NO. | DATE | REVISION | |
|---|---|---|---|
| 1 | 5-19-69 | AS NOTED | G.C.C. |

REF. DRWGS.
7-A63-3 & 10 7-22-68
7-A63-2 10-15-68
7-A64-[illegible] 1-3-69
7-A64-15, 16 & 38 7-22-68
7-A64-42 10-15-68
SA-A64 1-6-69
7-A61-3 7-22-68
7-A61-6 & 8 7-22-68

FLOOR PANEL DETAILS
WORLD TRADE CENTER
PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 40 (N)
BLDG. B FLOORS 40 (WEST)

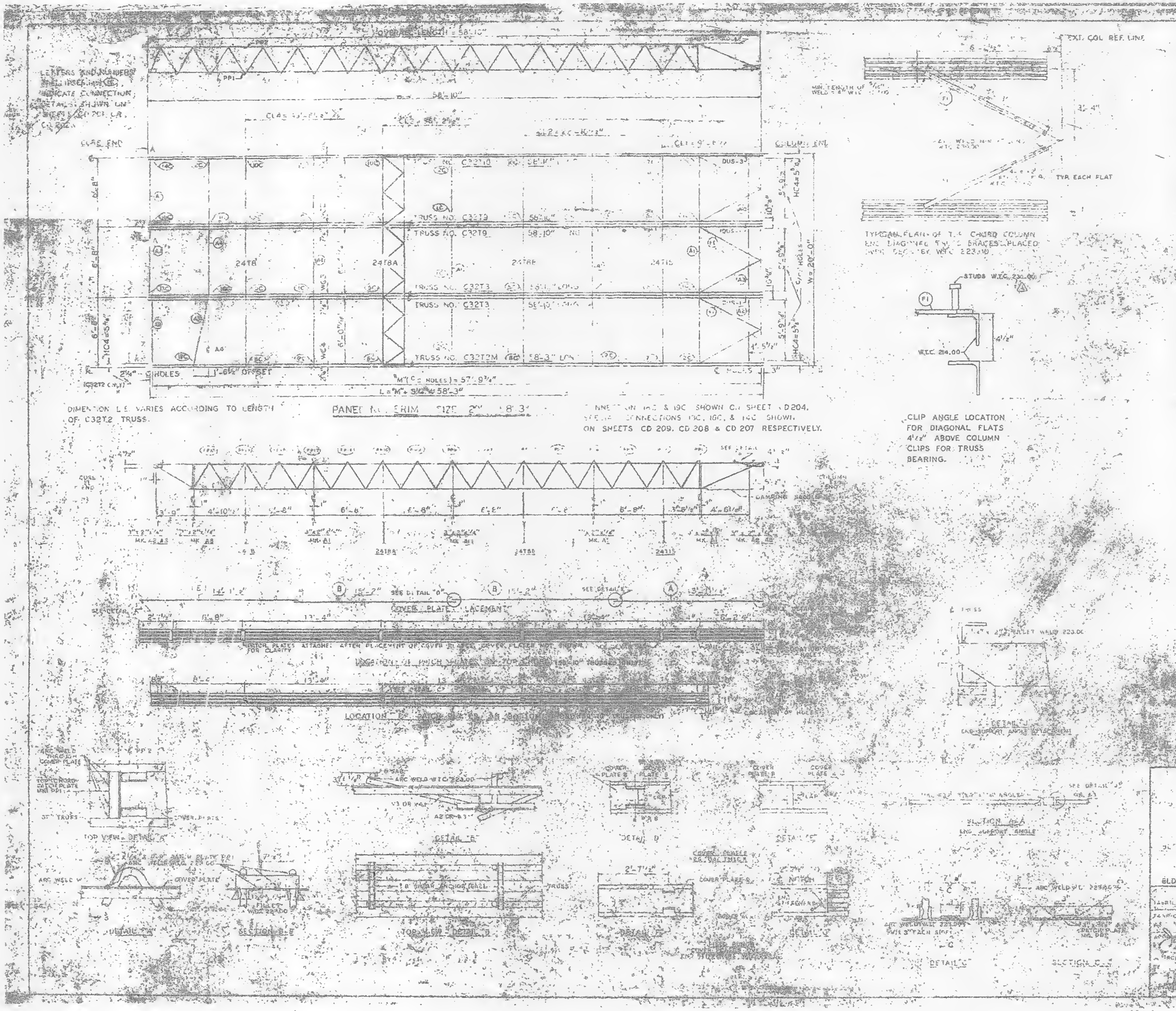
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION
DATE NOV [illegible]
LACLEDE STEEL CO.


TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2K 58'-6" LONG
COLUMN END
58'-10"
24T8
24T8A
24T15
HOLES
1'-6½" OFFSET
C HOLES
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. ERIK SIZE 20' x 58'-6"
CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
EXT. COL. SSF LINE
TYP. EACH FLAT
STUDS W.T.C. 230.00
W.T.C. 214.00
4½"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
LOCATION OF HOLES
SECTION A-A
DETAIL "B"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "E"
DETAIL "F"
SHEAR ANCHOR (SA2)
TRUSS
COVER PLATE B
COVER PLATE E
NOTCH
2'-7½"
7'-4"

| MATERIAL | MK. | NO. | SIZE | REF. |
|---|---|---|---|---|
| FLOOR TRUSSES | [illegible] | [illegible] | [illegible] - 58'-10" | [illegible] |
| | 22 | [illegible] | C32T3 - 58'-[illegible] | [illegible] |
| | 19 | [illegible] | C32T3 - 58'-[illegible] | ST [illegible] |
| | [illegible] | 1 | [illegible] | [illegible] |
| BRIDGING TRUSSES | [illegible] | [illegible] | [illegible] - 10'-11" | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| 3½" 2" x ¼" ANGLE | A5 | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| | A4 | 1 | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| DIAGONAL FLATS | F1 | [illegible] | [illegible] | [illegible] |
| COVER PLATES | A | 3 | [illegible] | [illegible] |
| | B | [illegible] | [illegible] x 18'-2" | [illegible] |
| | E | [illegible] | [illegible] | [illegible] |
| ANGLE CLIPS | C6 | [illegible] | [illegible] x 0'-8" | ST 401 |
| | C2 | 4 | [illegible] x 6" | ST 400 |
| DAMPING SADDLE | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | [illegible] | [illegible] | [illegible] |
| | CB2 | 5 | [illegible] x 1'-3" | ST 400 |
| | CB7 | 6 | [illegible] x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | [illegible] | [illegible] | [illegible] |
| | P2 | [illegible] | [illegible] | [illegible] |
| | P3 | [illegible] | 4½" x 39" x 1'-6" | ST 472 |
| | P5 | 3 | [illegible] | ST 400 |
| | P8 | 1 | [illegible] x 30" x 2'-9" | ST 401 |
| 8 SHEAR ANCHOR | SA2 | 6 | # 8 REBAR x 2'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | [illegible] x 0'-5" | ST 400 |
| | PP2 | 18 | [illegible] x 0'-[illegible] | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY-40 [illegible] RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1½" FULL THROAT FILLET.

FLOOR PANEL DETAILS
WORLD TRADE CENTER
PORT OF NEW YORK AUTHORITY
BLDG. A FLOOR 45-46 (N)
ERIK
BLDG. B FLOORS 45-46 (WEST)
FABRICATION BY LACLEDE STEEL COMPANY
DRAWN NOV 4
CHECKED
DATE NOV 5
LACLEDE STEEL CO.



REQUIRED MATERIAL SCHEDULE

| MATERIAL | MK | [illegible] | SIZE | [illegible] |
|---|---|---|---|---|
| FLOOR TRUSSES | [illegible] | 1 | [illegible] | [illegible] |
|  | 13 | [illegible] | C32T3 - 58'-10" | [illegible] |
|  | 19 | 2 | C32T9 - 58'-10" | ST 308 |
|  | 10 | 1 | C32T10 - 58'-10" | [illegible] |
| BRIDGING TRUSSES | 8 | 1 | 24T8 - 19'-[illegible] | [illegible] |
|  | 8A | [illegible] | 24T8A - [illegible] | [illegible] |
|  | 8B | [illegible] | 24T8B - [illegible] | [illegible] |
|  | 15 | [illegible] | 24T15 - [illegible] | [illegible] |
| 3" x 2" x ¼" ANGLE | A1 | [illegible] | 3" x 2" x [illegible] | [illegible] |
|  | A2 | [illegible] | [illegible] | [illegible] |
|  | A3 | [illegible] | 3" x 2" x [illegible] | [illegible] |
|  | A4 | 1 | [illegible] | [illegible] |
|  | A6 | 1 | [illegible] | [illegible] |
| DIAGONAL FLATS | [illegible] | [illegible] | [illegible] | [illegible] |
|  | [illegible] | 3 | [illegible] | [illegible] |
| COVER PLATES | C | 9 | [illegible] | ST 302 |
| ANGLE CLIPS | C1 | 20 | [illegible] | ST 400 |
|  | C2 | 4 | [illegible] | ST 400 |
| DAMPING SADDLE | DS | 2 | [illegible] | [illegible] |
|  | [illegible] | 1 | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | [illegible] | [illegible] ø x 1'-3" | [illegible] |
|  | CB2 | [illegible] | [illegible] ø x 1'-3" | [illegible] |
|  | CB3 | 6 | [illegible] ø x 1'-9" | [illegible] |
| CONNECTION PLATES | P1 | 5 | [illegible] | [illegible] |
|  | P2 | 1 | 4½" x .39" x 0'-9" | [illegible] |
|  | P3 | 1 | 4½" x .39" x 1'-0" | [illegible] |
|  | P5 | 3 | 4½" x [illegible] | ST 400 |
|  | P6 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x [illegible] | ST 400 |
| PATCH PLATES | PP1 | 16 | 2" x [illegible] x 0'-[illegible] | [illegible] |
|  | PP2 | 16 | [illegible] x 0'-[illegible] | [illegible] |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x [illegible] FULL THROAT FILLET.

| NO. | DATE | REVISION |
|---|---|---|
| 1 | 6-19-69 | AS NOTED |

REF. DRWGS

- 10-15-68
- 1-6-69

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER

PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 72-73 (N)

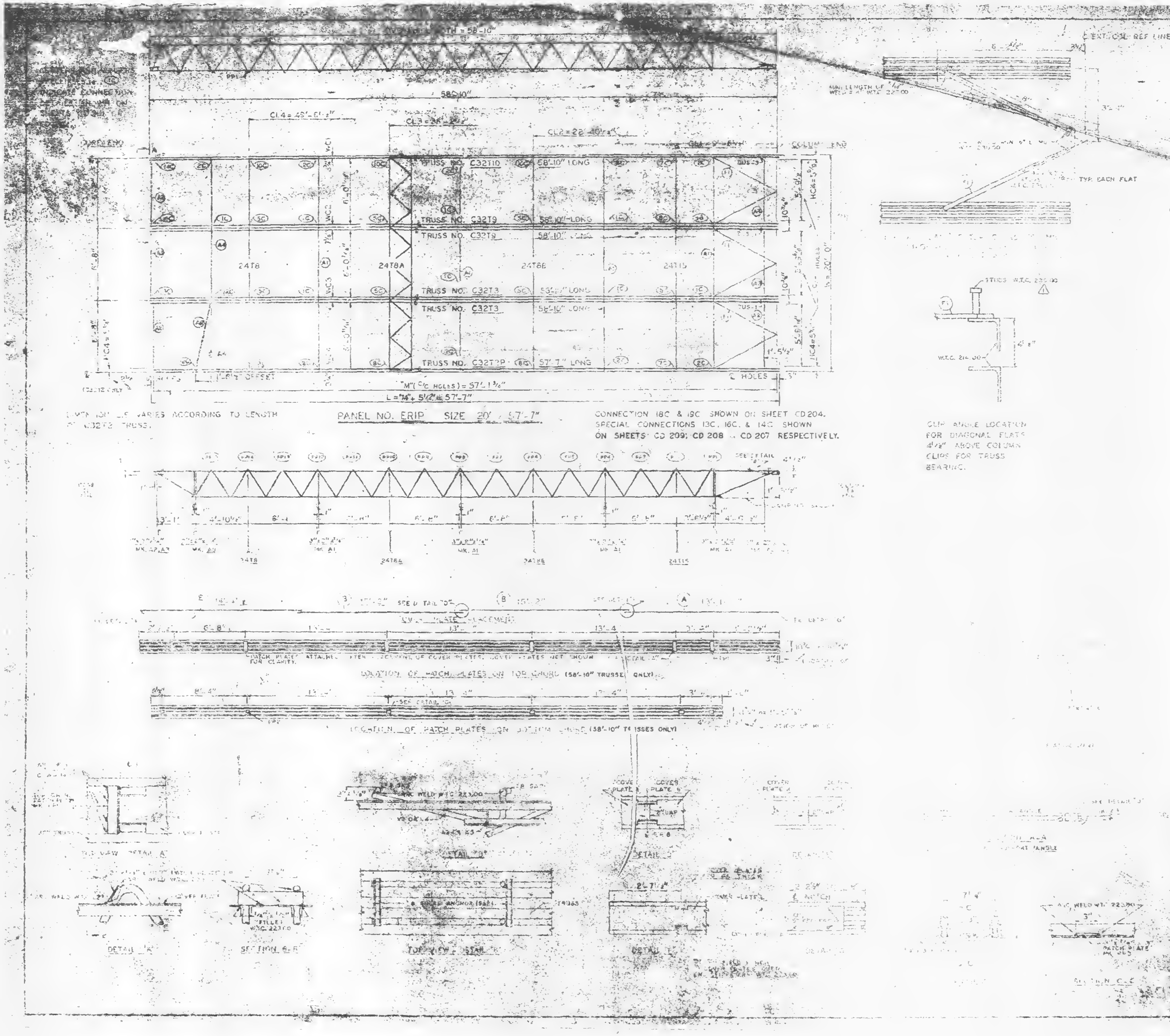
PANEL ERIM [illegible] x 58.3

BLDG. B FLOORS 72-73 (WEST)

FABRICATION BY [illegible] STEEL COMPANY

MADISON

ERIM


58'-10"
CL4 = 49'-6¼"
CL3 = 36'-[illegible]"
CL2 = 22'-10¼"
COLUMN END
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
24T8
24T8A
24T86
24T15
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2P 57'-7" LONG
"M" (C/C HOLES) = 57'-1¾"
L = "M" + 5½" = 57'-7"
C HOLES
TYP. EACH FLAT
STUDS W.T.C. 22300
W.T.C. 214.00
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
PATCH PLATES ATTACHED ... COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
DETAIL "C"
SECTION C-C
SHEAR ANCHOR (SA2)
EXTERIOR REF LINE

DIMENSION "L" VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIP SIZE 20' x 57'-7"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | REQ. | DESCRIPTION | [illegible] |
| FLOOR TRUSSES | T2P | 1 | C32T2P – 57'-7" | ST 202P |
| | T3 | 2 | C32T3 – 58'-10" | ST 203 |
| | T9 | 2 | C32T9 – 58'-10" | ST 209 |
| | T10 | 1 | C32T10 – 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 – 19'-11" | ST 208 |
| | T8A | 1 | 24T8A 19'-11" | ST 208A |
| | T86 | 1 | [illegible] | ST 208 |
| | T15 | 1 | 24T15 – 19'-[illegible]" | ST 215 |
| 3" x 2" x [illegible] ANGLE | A1 | 4 | 3" x 2" x 3/16" x [illegible] | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | [illegible] | [illegible] | ST [illegible] |
| | A4 | 3 | [illegible] | ST 403 |
| | [illegible] | [illegible] | [illegible] | ST 403 |
| DIAGONAL FLATS | F1 | [illegible] | [illegible] | ST [illegible] |
| COVER PLATES | A | [illegible] | [illegible] | ST 308 |
| | B | 3 | [illegible] | [illegible] |
| | C | 3 | [illegible] | ST 303 |
| ANGLE CLIPS | C1 | 20 | 3" x 3½" x ¼" x 0'-6" | ST 400 |
| | C2 | 4 | [illegible] | ST 400 |
| [illegible] | [illegible] | [illegible] | [illegible] | ST 299 |
| | [illegible] | [illegible] | [illegible] | ST 299 |
| CONNECTION BAR | [illegible] | 1 | [illegible] – 3" | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | [illegible] | 3 | [illegible] – 5" | ST 400 |
| CONNECTION [illegible] | P1 | 5 | 3½" x ⁵⁄₁₆" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .30" x 0'-6" | ST 400 |
| | P3 | 1 | 4½" x .32" x 1'-6" | ST 400 |
| | P5 | 3 | 4½" x ¼" x [illegible] | ST 400 |
| | P6 | 1 | 4½" x .30" x 0'-6" | ST 400 |
| SHEAR ANCHOR | SA2 | 6 | [illegible] x 0'-3" | ST 400 |
| PATCH PLATES | PP1 | 14 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | [illegible] | 3" x ¼" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. HOGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| 1 | 6-19-69 | AS NOTED | [illegible] |
|---|---|---|---|
| NO. | DATE | REVISION | |

REF. DRWGS

| | |
|---|---|
| 7-AB2-3 & 10 | 7-2-69 |
| 7-AB3-12 | 10-15-[illegible] |
| 7-AB4-[illegible] | [illegible] |
| 7-AB4-13, 16 & 30 | 7-22-[illegible] |
| 7-AB4-42 & 3 | 10-15-[illegible] |
| [illegible]-124 | 1-6-69 |
| [illegible] 3 | 7-22-[illegible] |
| 7-AB4-6, 7 & 8 | 7-22-[illegible] |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
[illegible]
PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 74 (N)

PANEL ERIP [illegible] 57'-7"

BLDG. B FLOORS 74 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING [illegible] 7-AB3-12 [illegible] 10-15-[illegible]

APPROVED FOR FABRICATION DATE 11/2/70

DRAWN BY [illegible] DATE NOV 4 [illegible]

APPROVED FOR FABRICATION DATE

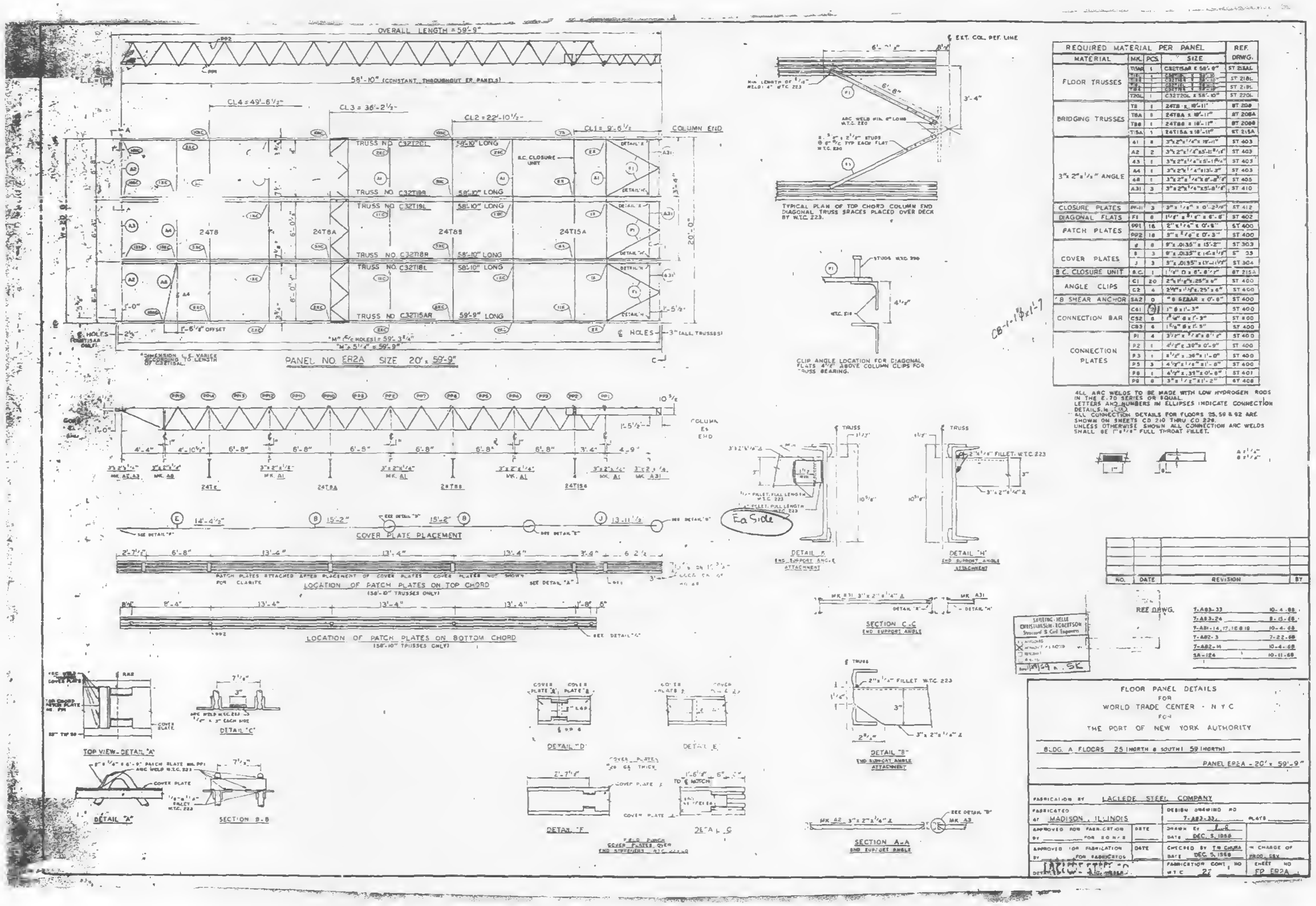
[illegible] FABRICATOR

CHECKED BY [illegible] DATE NOV 5 [illegible]

LACLEDE STEEL CO.

DETAILED BY [illegible]

[illegible] ERIP


OVERALL LENGTH = 59'-9"
58'-10" (CONSTANT THROUGHOUT FP PANELS)
CL4 = 49'-6 1/2"
CL3 = 38'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 8'-0 1/2"
COLUMN END
TRUSS NO. C32T20L 59'-9" LONG
TRUSS NO. C32T19R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T15AR 59'-9" LONG
B.C. CLOSURE UNIT
24T8
24T8A
24T8B
24T15A
20'-0"
PANEL NO. ER2A SIZE 20' x 59'-9"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
Ea Side
DETAIL "A" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "C"
DETAIL "A"
SECTION B-B
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
DETAIL "B" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T15AR | 1 | C32T15AR x 58'-0" | ST 215AL |
| | ~~T19L~~<br>~~T18R~~ | ~~1~~ | ~~C32T19L x 58'-10"~~<br>~~C32T18R x 58'-10"~~ | ST 218L |
| | ~~T18L~~<br>~~T19R~~ | ~~1~~ | ~~C32T18L x 58'-10"~~<br>~~C32T19R x 58'-10"~~ | ST 219L |
| | T20L | 1 | C32T20L x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 18'-11" | ST 208 |
| | T8A | 1 | 24T8A x 18'-11" | ST 208A |
| | T8B | 1 | 24T8B x 18'-11" | ST 208B |
| | T15A | 1 | 24T15A x 18'-11" | ST 215A |
| 3" x 2" x 1/4" ANGLE | A1 | 8 | 3" x 2" x 1/4" x 18'-11" | ST 403 |
| | A2 | 2 | 3" x 2" x 1/4" x 5'-11 3/16" | ST 403 |
| | A3 | 1 | 3" x 2" x 1/4" x 5'-1 3/4" | ST 403 |
| | A4 | 1 | 3" x 2" x 1/4" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 8'-8 1/8" | ST 405 |
| | A31 | 3 | 3" x 2" x 1/4" x 5'-8 1/8" | ST 410 |
| CLOSURE PLATES | PP-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/4" x 5/16" x 6'-6" | ST 402 |
| PATCH PLATES | PP1 | 16 | 2" x 1/4" x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x 1/4" x 0'-3" | ST 400 |
| COVER PLATES | E | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | B | 3 | 9" x .0135" x 14'-4 1/2" | ST 33 |
| | J | 3 | 9" x .0135" x 13'-11 1/2" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1 1/8" D x 8'-8 1/2" | ST 215A |
| ANGLE CLIPS | C1 | 20 | 2 1/2" x 1" x .25" x 6" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/4" x .25" x 6" | ST 400 |
| B SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-8" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 8 | 1 1/8" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 1/4" x 0'-1 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .30" x 0'-9" | ST 400 |
| | P3 | 1 | 2 1/2" x .36" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .31" x 0'-6" | ST 401 |
| | P8 | 8 | 3" x 1/2" x 1'-2" | ST 408 |

CB-1-1"ϕx1'-7

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E.70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (CX)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 228.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/8" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

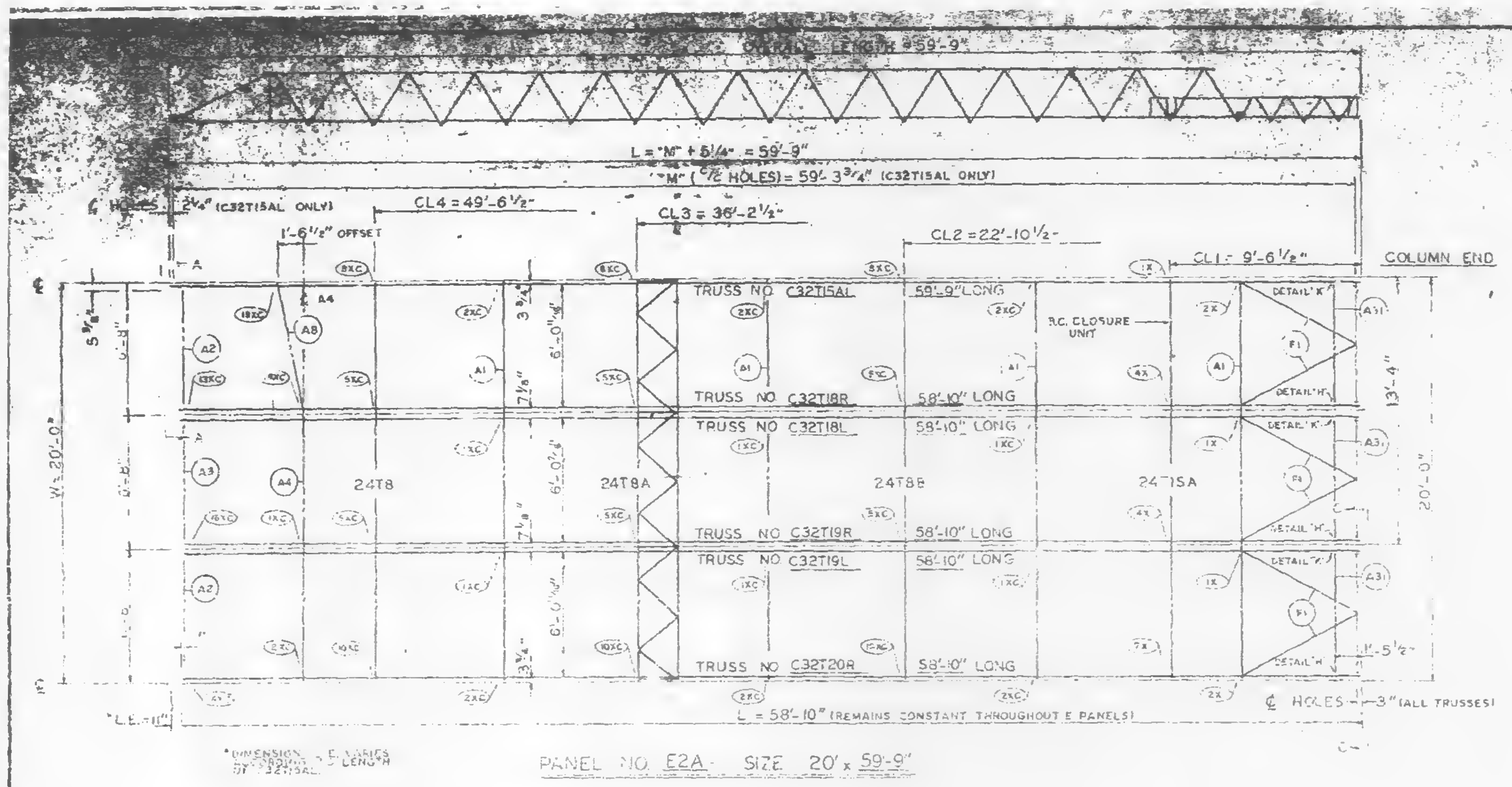
SKILLING · HELLE CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 1/14/69 By SK

| REF. DRWG. | |
|---|---|
| 7-A83-33 | 10-4-68 |
| 7-A83-24 | 8-15-68 |
| 7-A81-14, 17, 18 & 19 | 10-4-68 |
| 7-A82-3 | 7-22-68 |
| 7-A82-14 | 10-4-68 |
| SA-124 | 10-11-68 |

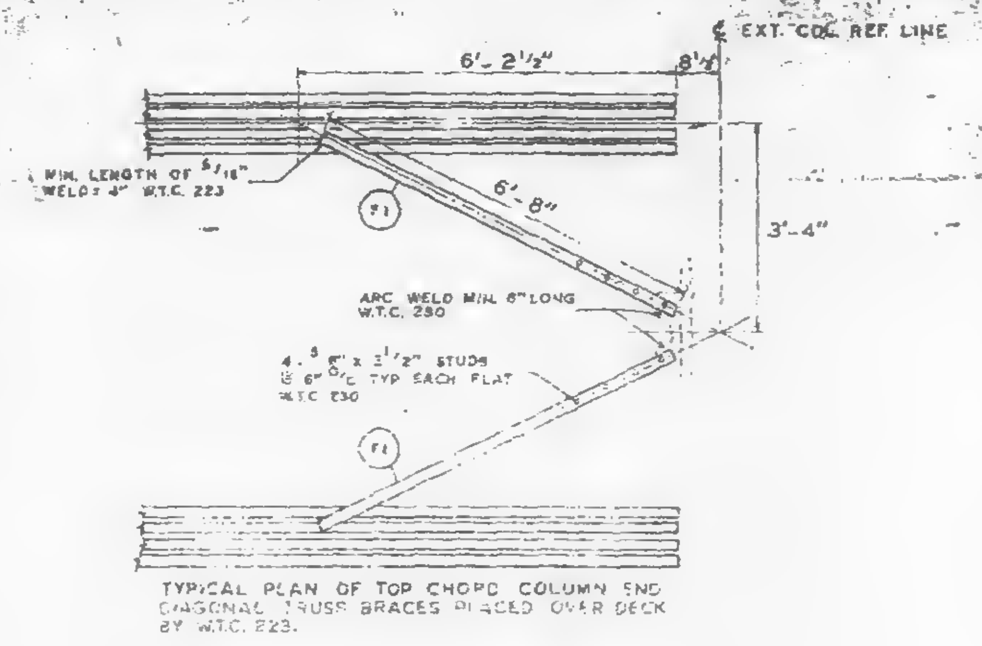
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL ER2A - 20' x 59'-9"

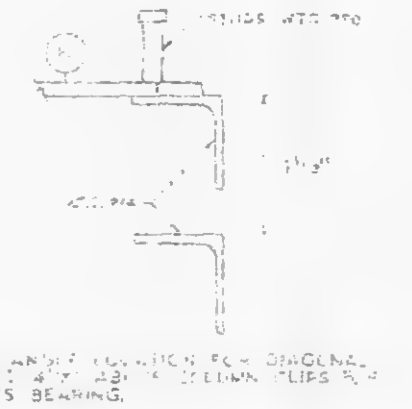
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-33 PLATE
APPROVED FOR FABRICATION BY FOR S.C.N.Y.S. DATE
DRAWN BY L.G. DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.H. CHURA DATE DEC. 5, 1968
IN CHARGE OF PROD. SEV.
DETAILED BY LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 22
SHEET NO. FP ER2A

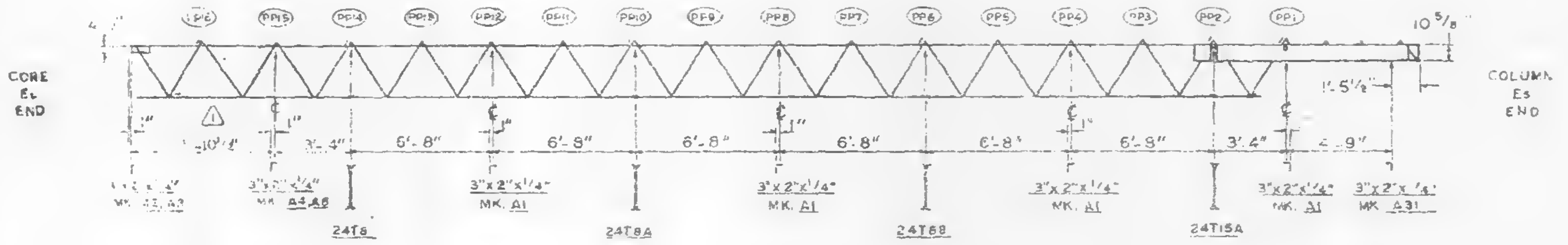

L = "M" + 8 1/4" = 59'-9"
"M" (℄ HOLES) = 59'-3 3/4" (C32T15AL ONLY)
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 - 9'-6 1/2"
COLUMN END
1'-6 1/2" OFFSET
TRUSS NO C32T15AL 59'-9" LONG
B.C. CLOSURE UNIT
TRUSS NO C32T18R 58'-10" LONG
TRUSS NO C32T18L 58'-10" LONG
24T8
24T8A
24T8B
24T15A
TRUSS NO C32T19R 58'-10" LONG
TRUSS NO C32T19L 58'-10" LONG
TRUSS NO C32T20R 58'-10" LONG
DETAIL "K"
DETAIL "H"
W = 20'-0"
20'-0"
13'-4"
L = 58'-10" (REMAINS CONSTANT THROUGHOUT E PANELS)
℄ HOLES - 3" (ALL TRUSSES)
*DIMENSION & LENGTH BY C32T15AL

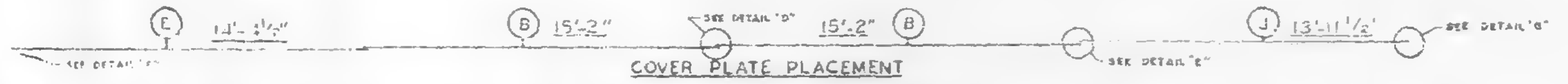
PANEL NO. E2A SIZE 20' x 59'-9"


6'-2 1/2"
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223
6'-8"
3'-4"
ARC WELD MIN. 8" LONG W.T.C. 280
4-3/8" x 3 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230
F1

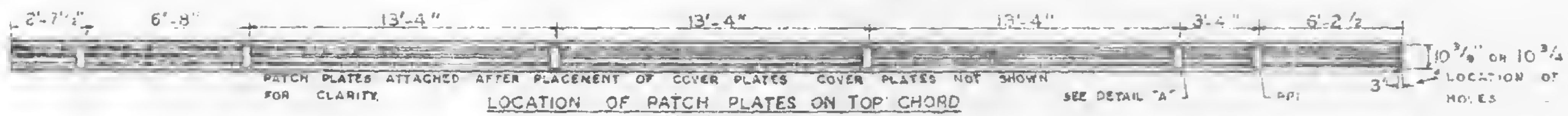
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



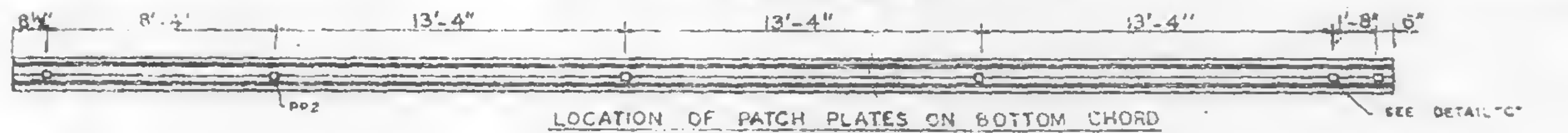




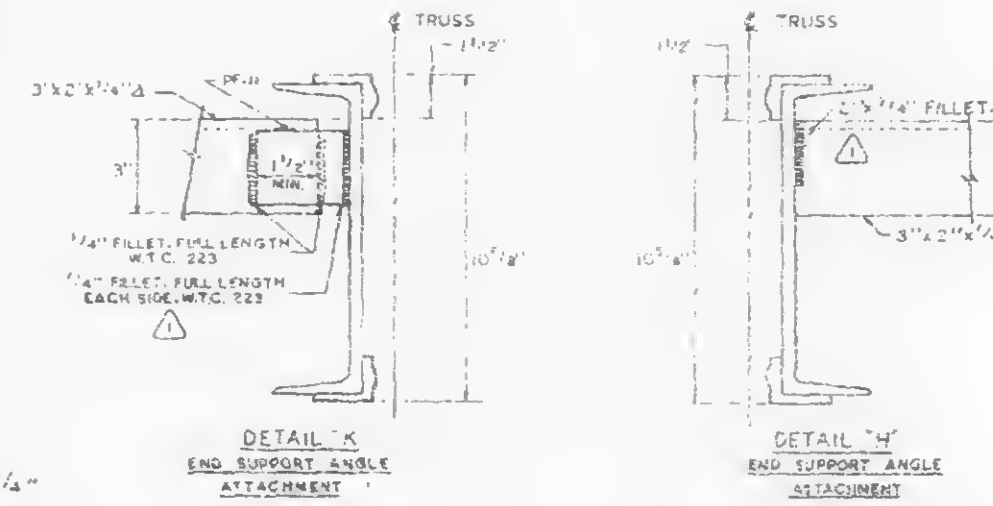
COVER PLATE PLACEMENT


2'-7 1/2" 6'-8" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"
10 3/8" OR 10 3/4" LOCATION OF HOLES
SEE DETAIL "A"
PP1
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)

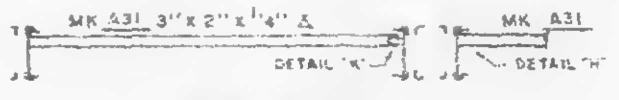


LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)

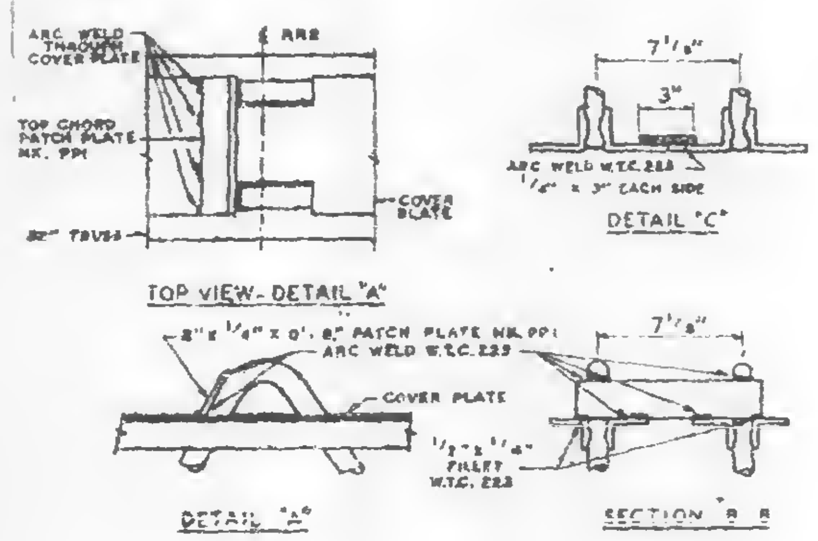

℄ TRUSS
3"x2"x1/4"
PF-11
1/4" FILLET FULL LENGTH W.T.C. 223
1/4" FILLET FULL LENGTH EACH SIDE W.T.C. 223
10 1/8"
℄ TRUSS
1/4" FILLET - W.T.C. 223
3"x2"x1/4"

DETAIL "K"
END SUPPORT ANGLE ATTACHMENT

DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE

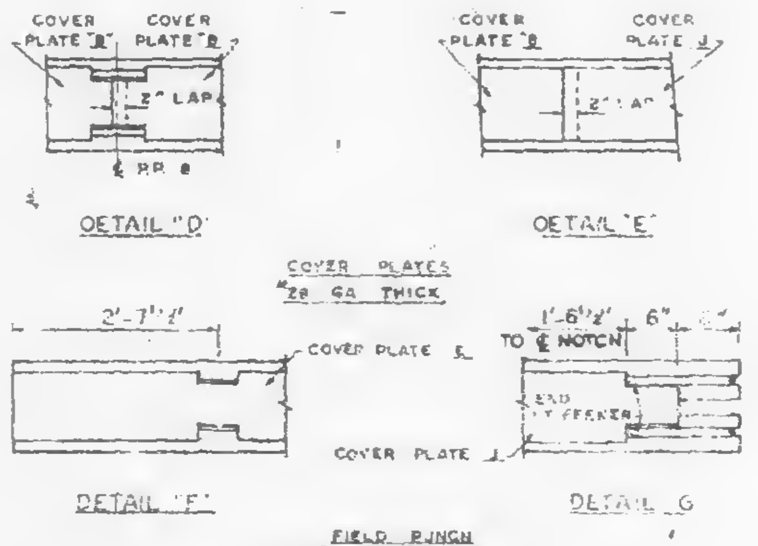

ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
COVER PLATE
7 1/2"
3"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
2" x 1/4" x 0'-9" PATCH PLATE MK. PP1
ARC WELD W.T.C. 223
COVER PLATE
7 1/2"
1/2" x 1/4" FILLET W.T.C. 223

TOP VIEW - DETAIL "A"

DETAIL "C"

DETAIL "A"

SECTION "B-B"



DETAIL "D"

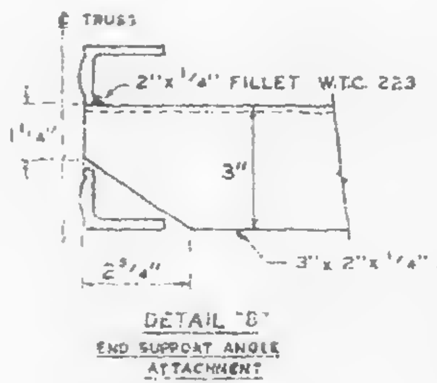
DETAIL "E"

COVER PLATES 28 GA. THICK

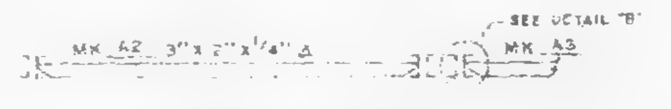
DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.



DETAIL "B"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T15AL | 1 | C32T15AL x 59'-9" | ST 215AL |
| | T18L | 1 | C32T18L x 58'-10" | ST 218L |
| | T18R | 1 | C32T18R x 58'-10" | |
| | T19L | 1 | C32T19L x 58'-10" | ST 219L |
| | T19R | 1 | C32T19R x 58'-10" | |
| | T20R | 1 | C32T20R x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | BT 208 |
| | T8A | 1 | 24T8A x 19'-11" | BT 208A |
| | T8B | 1 | 24T8B x 19'-11" | BT 208B |
| | T15A | 1 | 24T15A x 19'-11" | BT 215A |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x2"x1/4"x 19'-1" | ST 403 |
| | A2 | 2 | 3"x 2"x 1/4"x5'-11 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x 1/4"x5'-1 3/4" | ST 403 |
| | A4 | 1 | 3"x 2"x 1/4"x13'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x 1/4"x6'-8 5/8" | ST 405 |
| | A31 | 3 | 3"x 2"x 1/4"x5'-8 1/4" | ST 410 |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 8 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11 1/2" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1 1/4" Ø x 6'-6 1/2" | BT 215A |
| ANGLE CLIPS | C1 | 20 | 2"x 1 1/2"x .25"x 6" | ST 400 |
| | C2 | 4 | 2 1/2"x 1 1/2"x .25"x 6" | ST 400 |
| SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" Ø x 1'-3" | ST 400 |
| | CB2 | 8 | 1 3/8" Ø x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" Ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 2 1/2" x 3/8" x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P8 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 216 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

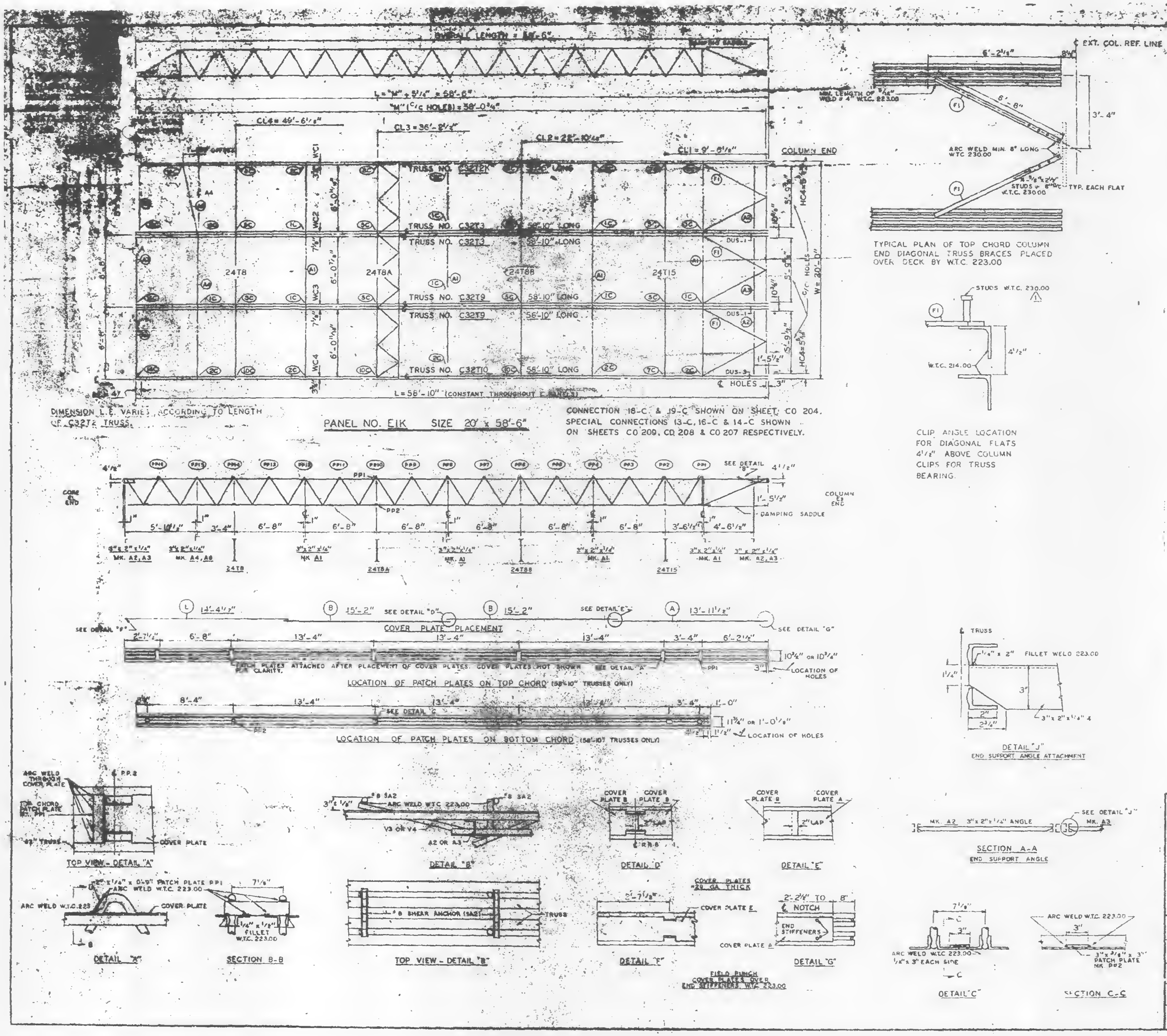
| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| 2 | 7-1-69 | AS NOTED | G.D.C. |
| 1 | 2-4-69 | AS NOTED | G.D.C. |

| REF. DRWG. | | |
|---|---|---|
| | 7-AB3-32 | 10-4-68 |
| | 7-AB3-24 | 8-15-68 |
| | 7-AB1-14, 17, 18 & 19 | 10-4-68 |
| | 7-AB2-3 | 7-22-68 |
| | 7-AB2-14 | 10-4-68 |
| | SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL E2A - 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-32 PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE
DRAWN BY Luk
DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHUBA
DATE DEC. 5, 1968
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY A.C. WICKER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP E2A



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. EIK SIZE 20' x 58'-6"

CONNECTION 18-C & 19-C SHOWN ON SHEET CO 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CO 209, CO 208 & CO 207 RESPECTIVELY.

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLE

TOP VIEW - DETAIL "A"

DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "A"

SECTION B-B

TOP VIEW - DETAIL "B"

DETAIL "F"

DETAIL "G"

DETAIL "C"

SECTION C-C

| REQUIRED MATERIAL PER PANEL<br>MATERIAL | MK. | PCS. | SIZE | REF. DRWG. |
|---|---|---|---|---|
| FLOOR TRUSSES | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼"x 6'-1[illegible]" | ST 403 |
| | A3 | 2 | 3"x 2"x¼"x 5'-1[illegible]" | ST 403 |
| | A4 | 1 | 3"x2"x¼"x 1[illegible]'-3" | ST 404 |
| | A8 | 1 | 3"x 2"x¼"x 6'-8[illegible]" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½"x ⅜"x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135"x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2"x 1½"x ¼"x 0'-6" | ST 400 |
| | C7 | 4 | 2½"x 1½"x ¼"x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x ⅜"x 3'-5⅞" | ST 298 |
| | DUS-3 | 1 | 3½"x 3½"x ⅜"x 3'-6⅛" | ST 298 |
| CONNECTION BAR | CB1 | 7 | 1" ∅ x 1'-3" | ST 400 |
| | CB2 | 6 | 1⅛" ∅ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅛" ∅ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½"x ⅜"x [illegible] | ST 400 |
| | P2 | 1 | 4½"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4½"x .39"x [illegible] | ST 400 |
| | P5 | 3 | 4½"x ¼"x 1'-6" | ST 400 |
| | P6 | 1 | 4½"x .39"x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-[illegible]" | [illegible] |
| PATCH PLATES | PP1 | 18 | 2"x ¼"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x ⅜"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-18-69 | AS NOTED | G.D.C. |

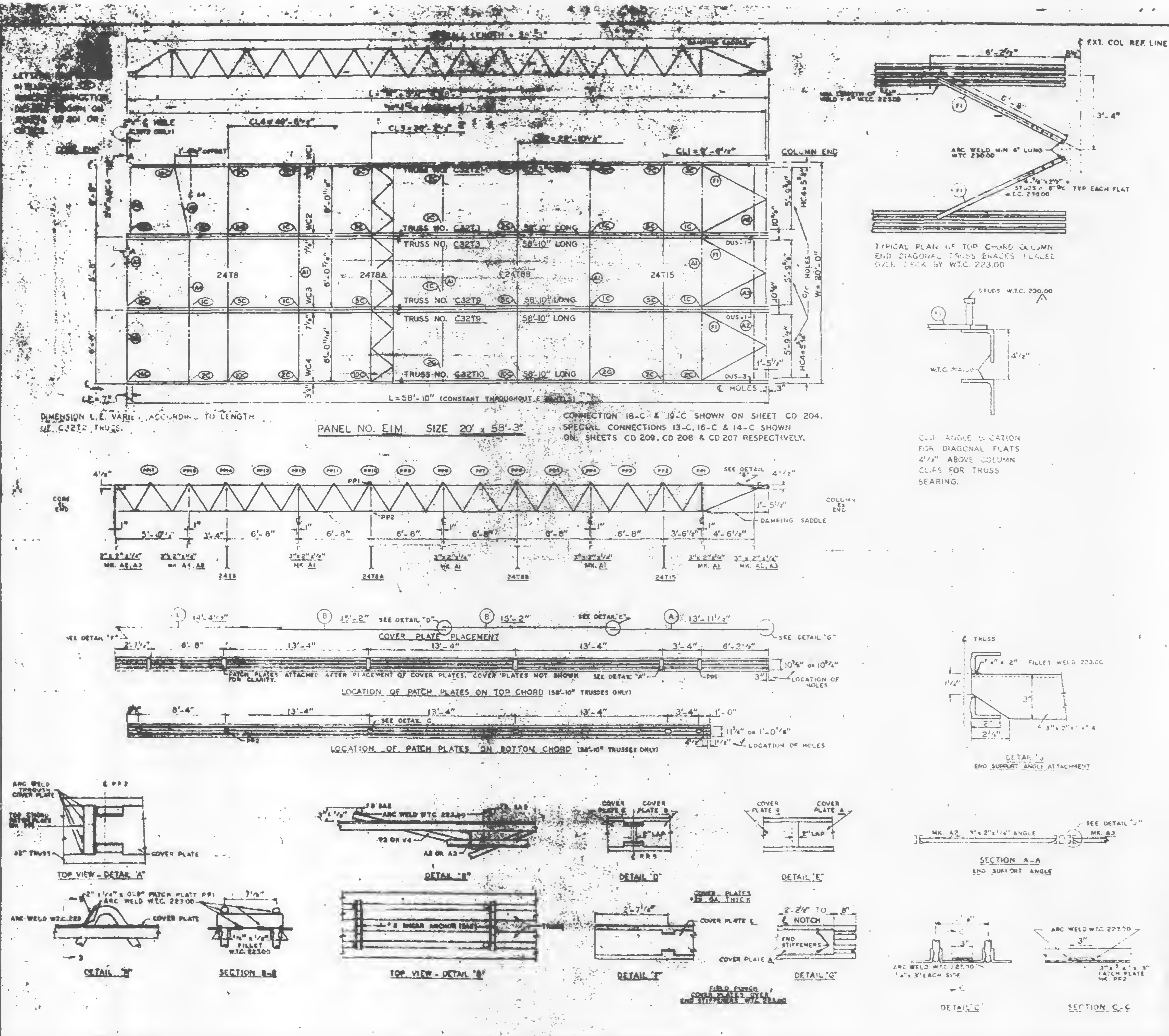
⚠1 REF. DRWGS.

| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-11 | 10-15-68 |
| 7-AB4-31 | 1-3-[illegible] |
| 7-AB4-15 & 16, 39 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-6, 7 & 8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46 (N)
PANEL EIK [illegible] 58'-6"
BLDG. B FLOORS 46 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-11
PLATE
APPROVED FOR FABRICATION BY James White [illegible] DATE 1/2/70
DRAWN BY gdc DATE NOV. 1, 1968
APPROVED FOR FABRICATION DATE
BY FOR FABRICATOR LACLEDE STEEL CO.
CHECKED BY T.M. CHURA DATE NOV. 4, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY J. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP EIK



| REQUIRED MATERIAL PER PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2M | 1 | C32T2M - 58'-3" | ST 202M |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-1" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-1" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x [illegible] | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x [illegible] | ST 403 |
| DIAGONAL FLATS | F1 | 2 | 1½" x ⅜" x 6'-9" | ST 402 |
| COVER PLATES | A | 3 | 6" x .0135" x 13'-11½" | ST 303 |
| | B | 4 | 6" x .0135" x 15'-2" | ST 303 |
| | E | 2 | 6" x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| | C7 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] x 3'-8½" | ST 268 |
| | [illegible] | [illegible] | 3½" x [illegible] | ST 268 |
| CONNECTION BAR | [illegible] | [illegible] | [illegible] | ST 4[illegible] |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | [illegible] | 6 | [illegible] | ST 400 |
| CONNECTION PLATES | [illegible] | 5 | [illegible] | ST 400 |
| | [illegible] | 1 | [illegible] | ST 400 |
| | F[illegible] | [illegible] | 4[illegible] | ST 4[illegible] |
| | [illegible] | [illegible] | 4½" x [illegible] x [illegible]-8" | ST 400 |
| | P[illegible] | 1 | 4[illegible] | ST 401 |
| #8 SHEAR [illegible] | SA2 | 6 | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 16 | 2" x [illegible] x 0" | ST 4[illegible] |
| | PP2 | 18 | 3" x [illegible] | ST 4[illegible] |

(1) ALL ARC WELD TO BE MADE WITH LOW HY[illegible] RODS IN THE E-70 SERIES OR EQUAL.

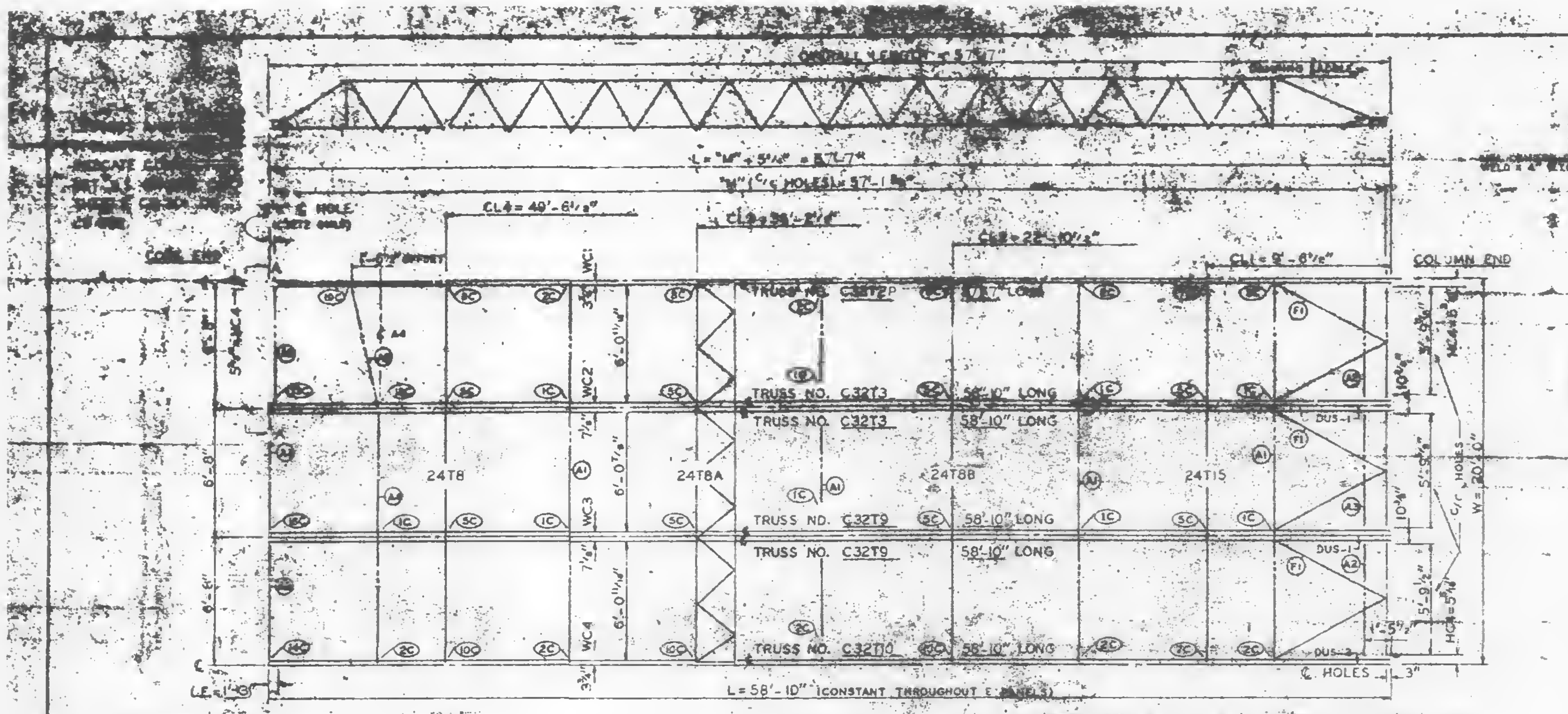
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼ x 1" FULL THROAT FILLET.

| NO. | DATE | | REVISION |
|---|---|---|---|
| 4 | 8-18-69 | AS NOTED | |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL E1M 20' x 58'-3"
BLDG. B FLOORS 72-73 (WEST) 4

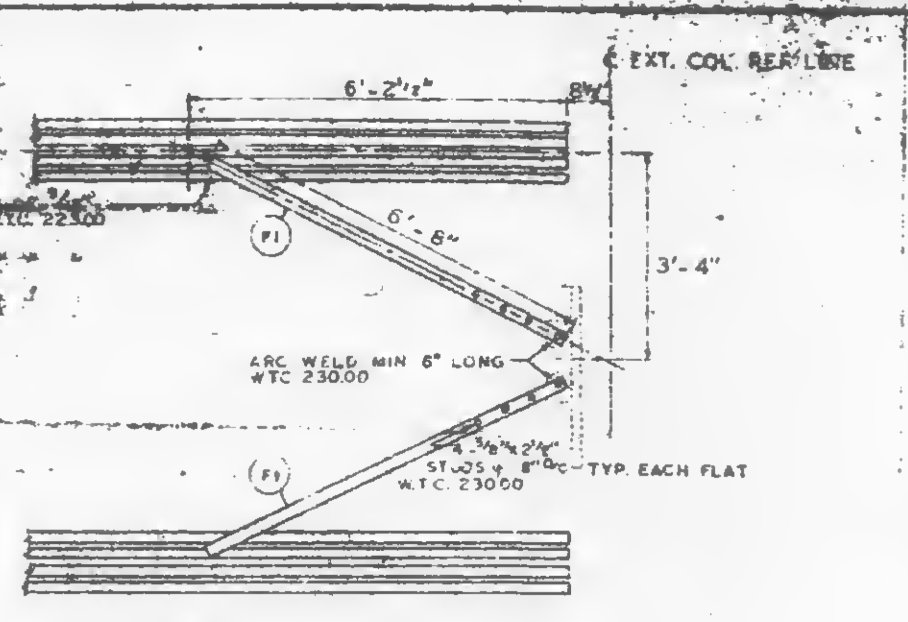
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. [illegible] AB2-11
APPROVED FOR FABRICATION FOR PORT A. James W. White DATE 1/2/70
DRAWN BY [illegible] DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE NOV. 4, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP E1M



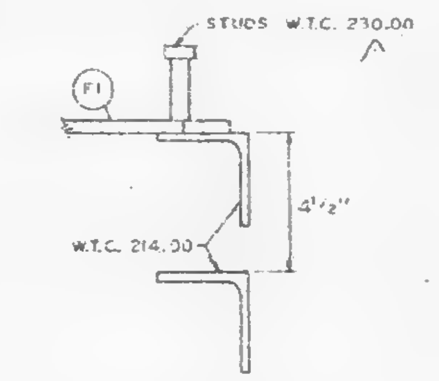
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

## PANEL NO. E1P SIZE 20' x 57'-7"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN
ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.


6'-2½"
8½"
EXT. COL. REF. LINE
WELD 4" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS ½" x 8" C/C TYP. EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

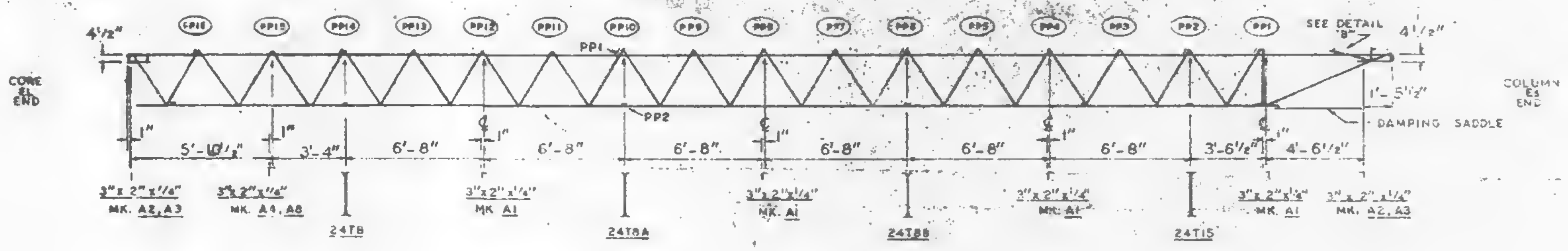


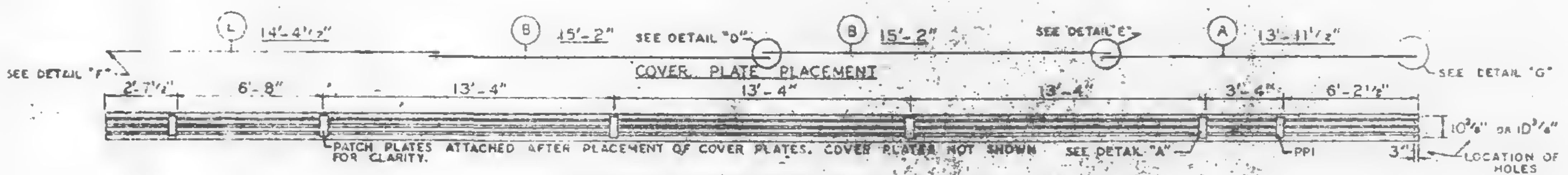
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL |  |  |  | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T2P | 1 | C32T2P - 57'-7" | ST 202P |
|  | T3 | 2 | C32T3 - 58'-10" | ST 203 |
|  | T9 | 2 | C32T9 - 58'-10" | ST 209 |
|  | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
|  | T8A | 1 | 24T8A - 19'-11" | ST 208A |
|  | T8B | 1 | 24T8B - 19'-11" | ST 208B |
|  | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
|  | A2 | 4 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
|  | A3 | 2 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
|  | A4 | 1 | 3" x 2" x ¼" x 19'-3" | ST 403 |
|  | A8 | 1 | 3" x 2" x ¼" x 6'-5⅜" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ¾" x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
|  | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
|  | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 26 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
|  | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x [illegible] | ST 298 |
|  | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅛" | ST 293 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
|  | CB2 | 5 | 1⅜" ϕ x 1'-3" | ST 400 |
|  | CB3 | 6 | 1⅝" ϕ x 1'-3" | ST 400 |
| CONNECTION PLATES | F1 | 5 | 3½" x ⅜" x [illegible] | ST 400 |
|  | F2 | 1 | 4½" x [illegible] | ST 400 |
|  | F3 | 1 | 4½" x [illegible] x 1'-0" | ST 400 |
|  | F5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
|  | PF | 1 | 4½" x [illegible] x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible] | ST 410 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
|  | PP2 | 18 | 3" x ⅜" x 0'-7" | ST 400 |

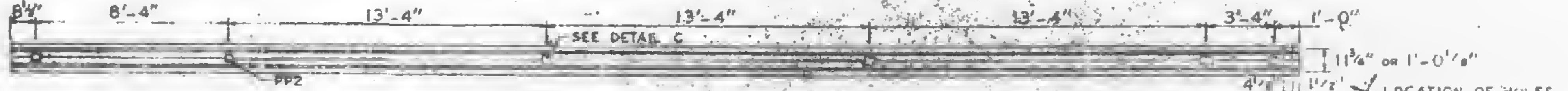
(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

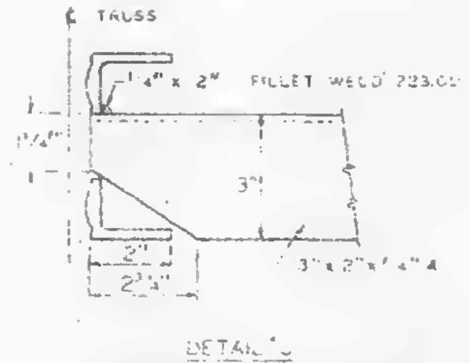




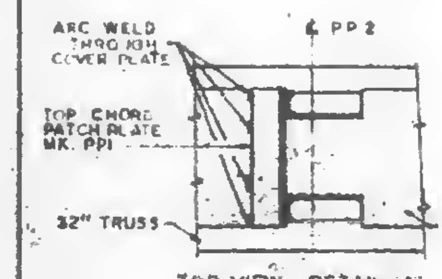
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)



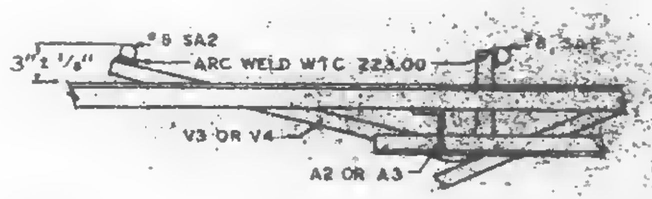
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)



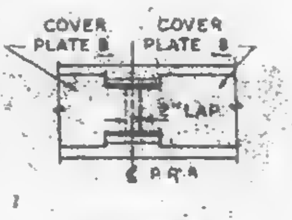
DETAIL "C"
END SUPPORT ANGLE ATTACHMENT



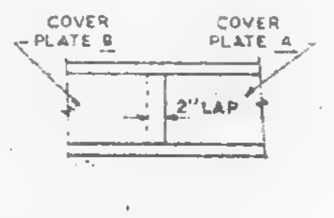
TOP VIEW - DETAIL "A"



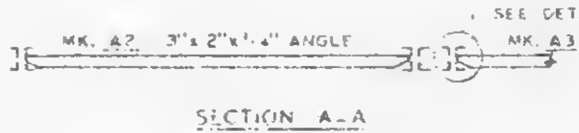
DETAIL "B"



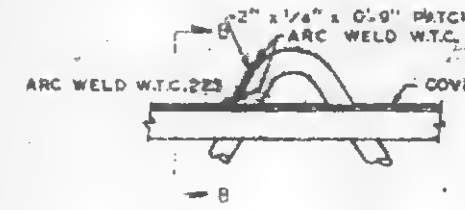
DETAIL "D"



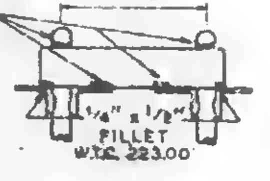
DETAIL "E"



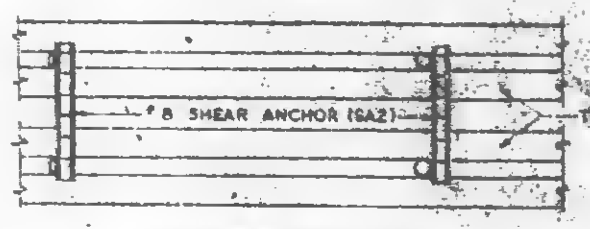
SECTION A-A
END SUPPORT ANGLE



DETAIL "A"



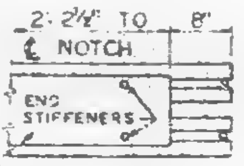
SECTION B-B



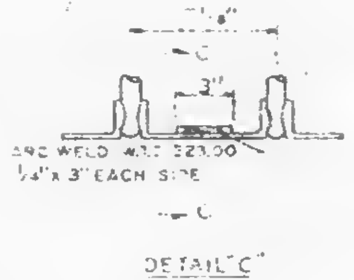
TOP VIEW - DETAIL "B"

DETAIL "F"

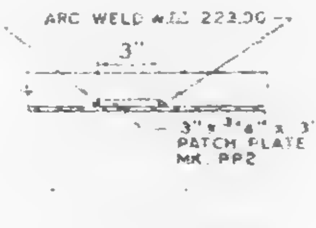
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "G"



DETAIL "C"



SECTION C-C

| NO | DATE | REVISION |
|---|---|---|
| 1 | 6-18-69 | AS NOTED |

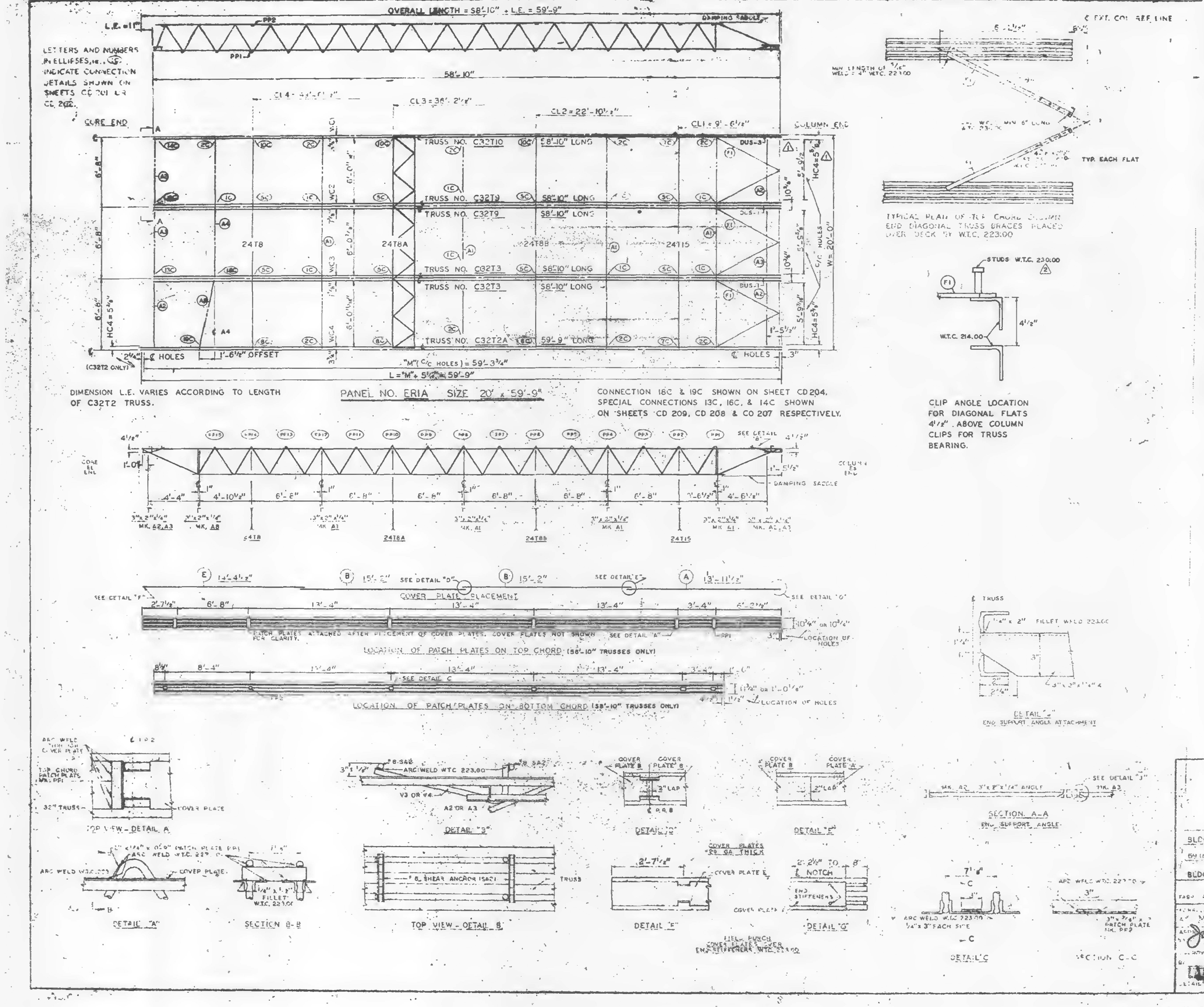
REF. DWGS.

| | |
|---|---|
| 7-AB7-[illegible] | 7-22-69 |
| 7-AB3-11 | 10-15-68 |
| 7-AB4-31 | 1-3-69 |
| 7-AB4-15 & 15-30 | 7-22-69 |
| 7-AB4-42 & 3 | 10-15-68 |
| SA-[illegible]4 | 1-6-69 |
| 7-AB1-3 | 7-22-69 |
| 7-AB1-6, 7 & 8 | 7-22-69 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N)
PANEL E1P L = 57'-7"
BLDG. B FLOORS 74 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-11
PLATE
APPROVED FOR FABRICATION BY James White PNYA DATE 1/2/70
DRAWN BY Q.S.L. DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE NOV. 4, 1968
IN CHARGE OF PROJ. ENG.
DETAILED BY A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP E1P



LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIA SIZE 20' x 59'-9"

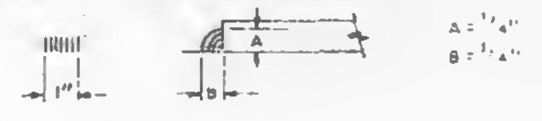
CONNECTION 16C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| [illegible] | | | | |
|---|---|---|---|---|
| MATERIAL | [illegible] | [illegible] | [illegible] | DWG. |
| FLOOR TRUSSES | [illegible] | [illegible] | [illegible] | [illegible] |
| | T3 | [illegible] | [illegible] 58'-10" | ST 203 |
| | T6 | [illegible] | [illegible] 58'-10" | ST 209 |
| | [illegible] | 1 | [illegible] 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | [illegible] | 24T8 [illegible] | [illegible] 208 |
| | T8A | 1 | 24T8A [illegible] | [illegible] 208A |
| | T8B | [illegible] | 24T8B [illegible] | [illegible] 208B |
| | T15 | [illegible] | 24T15 [illegible] | [illegible] 215 |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | [illegible] |
| | A3 | 2 | [illegible] | [illegible] |
| | A4 | 1 | 3"x2"x1/4" x 13'-5" | ST 405 |
| | A8 | 1 | 3"x2"x1/4" x 6'-8 5/8" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x [illegible] | ST 303 |
| | B | [illegible] | [illegible] | [illegible] |
| | L | 3 | 9" x .0135" x 14'-4 2" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 3" x 1 1/2" x 1/4" x [illegible] | ST 40[illegible] |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x [illegible] | [illegible] |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | ST 398 |
| | DUS-3 | 1 | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 402 |
| | CB2 | [illegible] | 1 3/16" ⌀ x 1'-3" | [illegible] |
| | CB3 | 6 | 1 3/8" ⌀ x 1'-5" | [illegible] |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | [illegible] |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | [illegible] |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 4[illegible] |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 4[illegible] |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



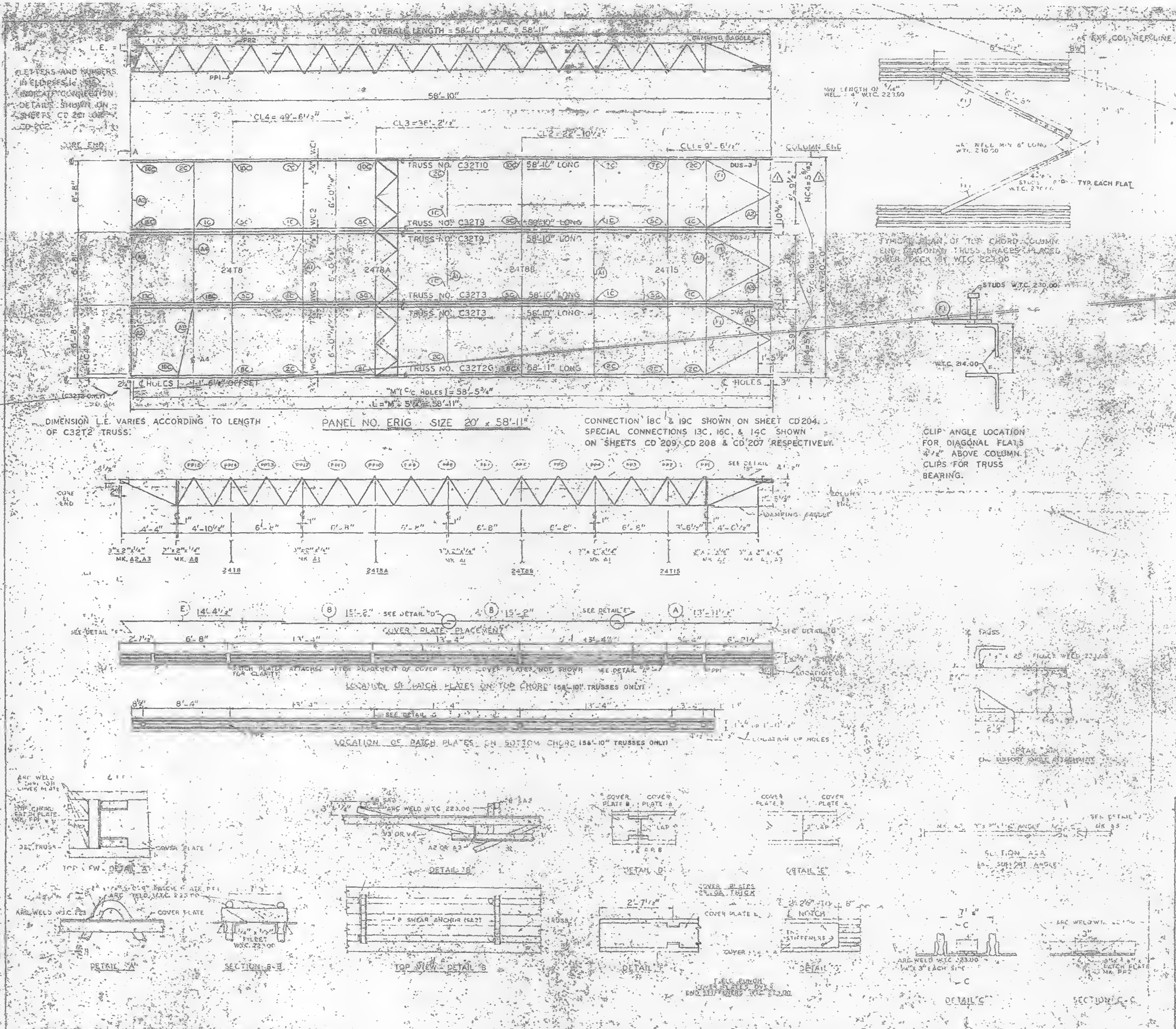
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ② | 6-19-69 | AS NOTED | G.D.C. |
| ① | 9-19-68 | AS NOTED | T.M.C. |

② REF. DWGS.
7-A87-2 & 10 7-22-68
7-A8-12 10-13-68
7-A84-3 [illegible]-68
7-A84-26 & 39 7-22-68
7-A84-1 & 3 10-15-68
SA-124 1-6-69
7-A81-3 7-22-68
7-A81-6,7 & 8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS [illegible] NORTH & SOUTH [illegible] 66, 68, 69 (NORTH)
PANEL ERIA
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60 [illegible] ②

FABRICATED BY [illegible] STEEL COMPANY
[illegible] MADISON, ILLINOIS
DRAWING NO. 7 A[illegible] 12
APPROVED FOR FABRICATION BY James White DATE 1/2/70
DATE JULY 22, 1968
[illegible] CO.
ERIA


OVERALL LENGTH = 58'-10" + L.E. = 58'-11"
L.E. = 1"
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202
58'-10"
CL4 = 49'-8½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2G 58'-11" LONG
24T8
24T8A
24T8B
24T15
HOLES
"M" C to C HOLES = 58'-5¾"
L.E. = "M" + 5⅞" = 58'-11"
PANEL NO. ERIG SIZE 20' x 58'-11"
STUDS W.T.C. 230.00
W.T.C. 214.00
TYPICAL PLAN OF TOP CHORD, COLUMN END DIAGONAL TRUSS BRACES PLACED OVER BACK BY W.T.C. 223.00
TYP. EACH FLAT
4'-4" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-0½"
DAMPING SADDLE
COVER PLATE PLACEMENT
14'-4½" 15'-6" 15'-2" 13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
LOCATION OF HOLES
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
DETAIL "D"
DETAIL "E"
SECTION A-A
DETAIL "C"
SECTION C-C
8 SHEAR ANCHOR (SA2)
COVER PLATE
ARC WELD W.T.C. 223.00

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF DWG |
|---|---|---|---|---|
| MATERIAL | MK | REQ | SIZE | |
| FLOOR TRUSSES | T2G | 1 | C32T2G - 58'-11" | ST 202G |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 1 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - [illegible] | ST 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-1" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| | A4 | 1 | 3"x 2" x ¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x 6'-8⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 6" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 6" x .0135" x 15'-2" | ST 303 |
| | C | 6 | 9" x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | [illegible] | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ¾" x 3'-5⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-8⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ɸ x [illegible]-3" | ST 400 |
| | CB2 | 4 | ¾" ɸ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ɸ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 5½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-6" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 3½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| 8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"

B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 5-19-69 | AS NOTED | G.D.C. |
| 1 | 9-19-68 | AS NOTED | T.N.C. |

2 REF. DRWGS.

| | |
|---|---|
| [illegible]-A82-3 & 10 | 7-22-68 |
| [illegible]-A83-12 | 10-15-68 |
| [illegible]-A84-[illegible] | 1-3-68 |
| [illegible]-A84-15, 16 & 39 | 7-22-68 |
| [illegible]-A84-42 & 3 | 10-15-68 |
| SA-12A | 1-6-69 |
| [illegible]-A85-3 | 7-22-68 |
| [illegible]-A81-6, 7 & 8 | 7-22-68 |

FLOOR PANEL DETAILS

WORLD TRADE CENTER N.Y.

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11, 39 (NORTH) 39-40 (SOUTH) 2

[illegible] ERIG [illegible] 58'-11"

BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) 2

FABRICATION BY [illegible] STEEL [illegible]

FABRICATED
ST. MADISON, ILLINOIS

[illegible] 7 A3212

James White 1/2/70

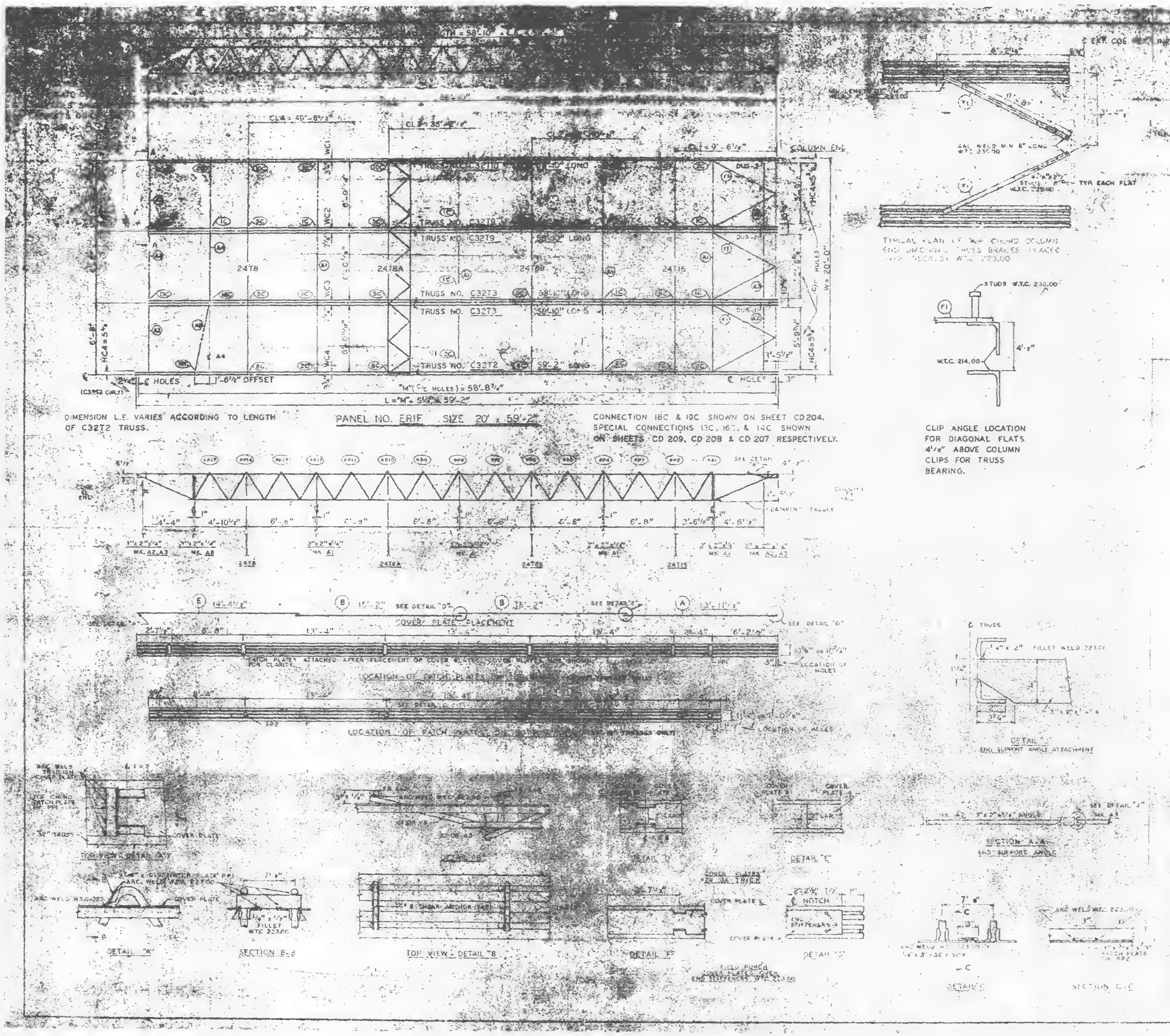
DATE JULY 22, 1968

CHECKED BY [illegible]

DATE JULY 22, 1968

FABRICATION CONT. NO. 221

FP ERIG



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIF SIZE 20' x 59'-2"

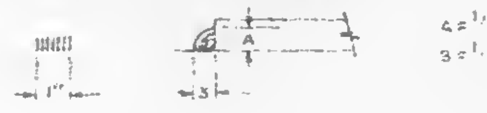
CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2F | 1 | C32T2F - 59'-2" | ST 202F |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-1½" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅞" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x 6'-8⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 13'-[illegible] | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-0" | ST [illegible] |
| | C2 | 4 | [illegible] | ST [illegible] |
| DAMPING SADDLES | [illegible] | 2 | [illegible] | ST [illegible] |
| | DUS 3 | 1 | [illegible] | ST [illegible] |
| CONNECTION BAR | [illegible] | [illegible] | [illegible] | ST 402 |
| | [illegible] | [illegible] | [illegible] | ST 402 |
| | [illegible] | 6 | [illegible] | [illegible] |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 8½" | ST [illegible] |
| | P2 | 1 | [illegible] x .39" x 0' 9" | ST [illegible] |
| | P3 | 1 | [illegible] x .39" x 1' 0" | ST [illegible] |
| | P5 | 3 | [illegible] | ST 400 |
| | P8 | 1 | [illegible] x .39 x 0'-9" | ST 401 |
| ⅜ SHEAR ANCHOR | SA2 | 6 | [illegible] | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x [illegible] x 0'-9" | ST [illegible] |
| | PP2 | 18 | 3" x [illegible] x 0'-3" | ST [illegible] |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUIV.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 5-19-69 | AS NOTED | G.D.C. |

REF. DRWGS. ⚠1

| | |
|---|---|
| [illegible] 2-3 & 10 | 7-22-[illegible] |
| [illegible]-12 | 10-15-[illegible] |
| [illegible] | [illegible] |
| [illegible]-15, 15 & 39 | 7-22-[illegible] |
| [illegible] 2 & 3 | 10-15-[illegible] |
| [illegible] | 1-5-69 |
| [illegible] | [illegible] |
| [illegible] 6, 7 & 8 | [illegible] |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 47-48, 70-71 (N)

BLDG. B FLOORS 47-48, 70-71 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

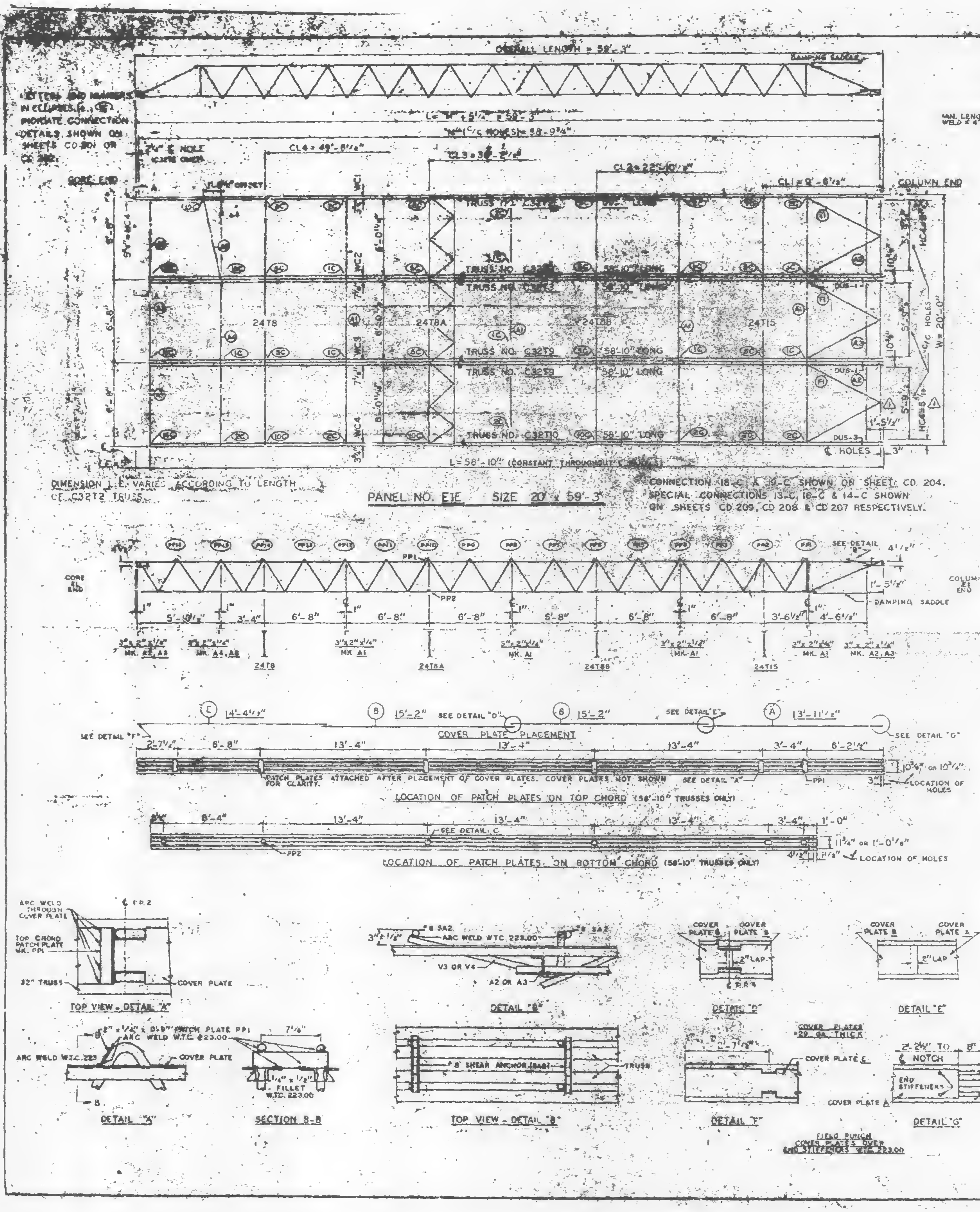
FABRICATED AT MADISON, ILLINOIS

James White 1/2/70

APPROVED FOR FABRICATION

LACLEDE STEEL CO.

ERIF



PANEL NO. E1E SIZE 20' x 59'-3"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

TOP VIEW - DETAIL "A"

DETAIL "B"

DETAIL "D"

DETAIL "E"

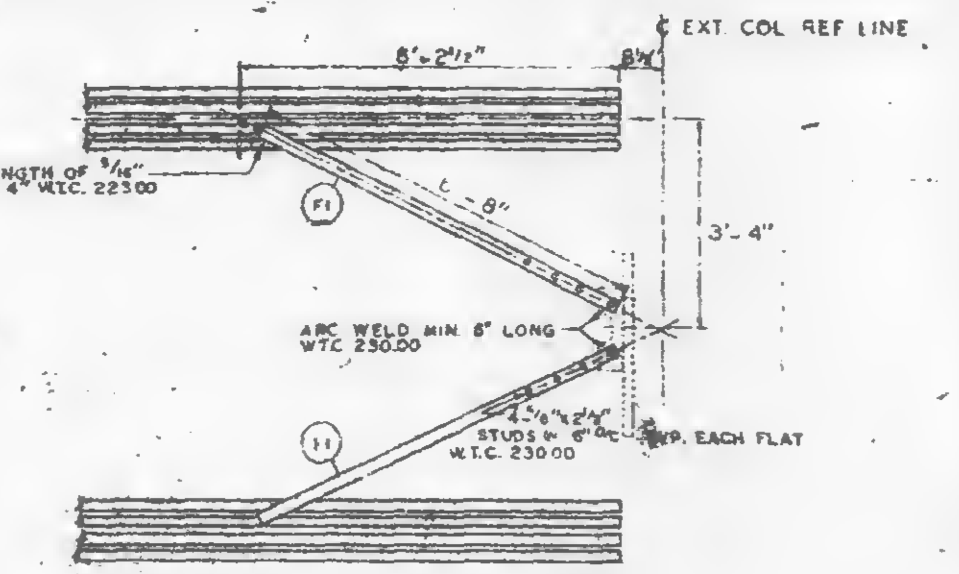
DETAIL "A"

SECTION B-B

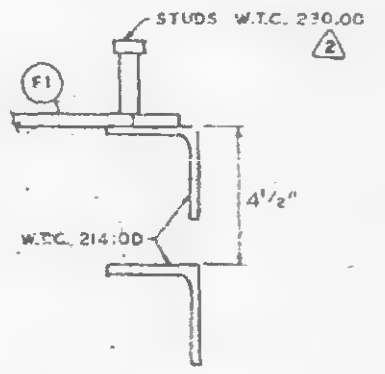
TOP VIEW - DETAIL "B"

DETAIL "F"

DETAIL "G"


℄ EXT. COL. REF LINE
8'-2 1/2"
8 1/4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN 8" LONG W.T.C. 230.00
4 5/8" x 2 1/4" STUDS @ 6" O.C. W.T.C. 230.00
TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

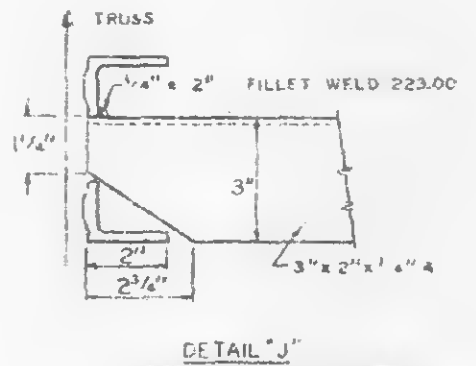


CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4 1/2" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2E | 1 | C32T2E - 52'-3" | ST 202E |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x 2"x 1/4"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x 1/4"x 5'-11 [illegible]" | ST 403 |
| | A3 | 2 | 3"x 2"x 1/4"x 5'-11 [illegible]" | ST 403 |
| | A4 | 1 | 3"x 2"x 1/4"x 19'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x 1/4"x 6'-8 3/8" | ST 405 |
| DIAGONAL FLATS | F1 | 2 | 1 1/2"x 3/8"x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11 1/2" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 3 | 9"x .0135"x 14'-4 1/2" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2"x 1 1/2"x 1/4"x 0'-6" | ST 400 |
| | C2 | 4 | 2 1/2"x 1 1/2"x 1/4"x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2"x 3/8"x 3'-8 [illegible]" | ST 298 |
| | DUS-3 | 1 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 [illegible]" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ø x 1'-3" | ST 400 |
| | CB2 | 3 | 1 3/16" ø x 1'-3" | ST 400 |
| | CB3 | 6 | 1 3/8" ø x 1'-5" | ST 400 |
| CONNECTION PLATES | F1 | 5 | 3 1/2"x 3/8"x [illegible] | ST 400 |
| | F2 | 1 | 4 1/2"x 3/4"x 0'-8" | ST 400 |
| | F3 | 1 | 4 1/2"x 3/4"x 1'-0" | ST 400 |
| | F5 | 3 | 4 1/2"x 1/4"x 1'-6" | ST 400 |
| | PC | 1 | 4 1/2"x [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible] | ST 4[illegible] |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

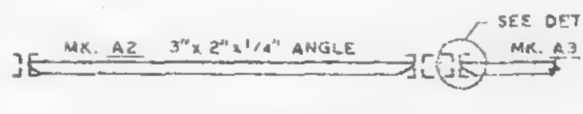
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



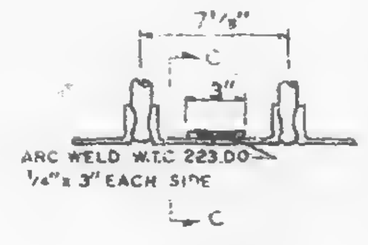
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

| NO. | DATE | REVISION | |
|---|---|---|---|
| 2 | 5-18-69 | AS NOTED | GUC |
| 1 | 9-19-68 | AS NOTED | EMC |

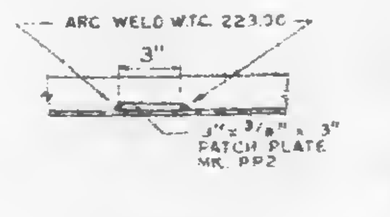
2 REF DRWGS
7-AB2-9 & 10 7-26-66
7-AB3-11 10-15-66
7-AB4-[illegible] [illegible]
7-AB4-15, 16 & 39 7-26-66
7-AB4-42 & 3 10-15-66
[illegible]-124 [illegible]-5-68
7-AB1-3 7-22-66
7-AB1-6, 7 & 8 7-22-66



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"

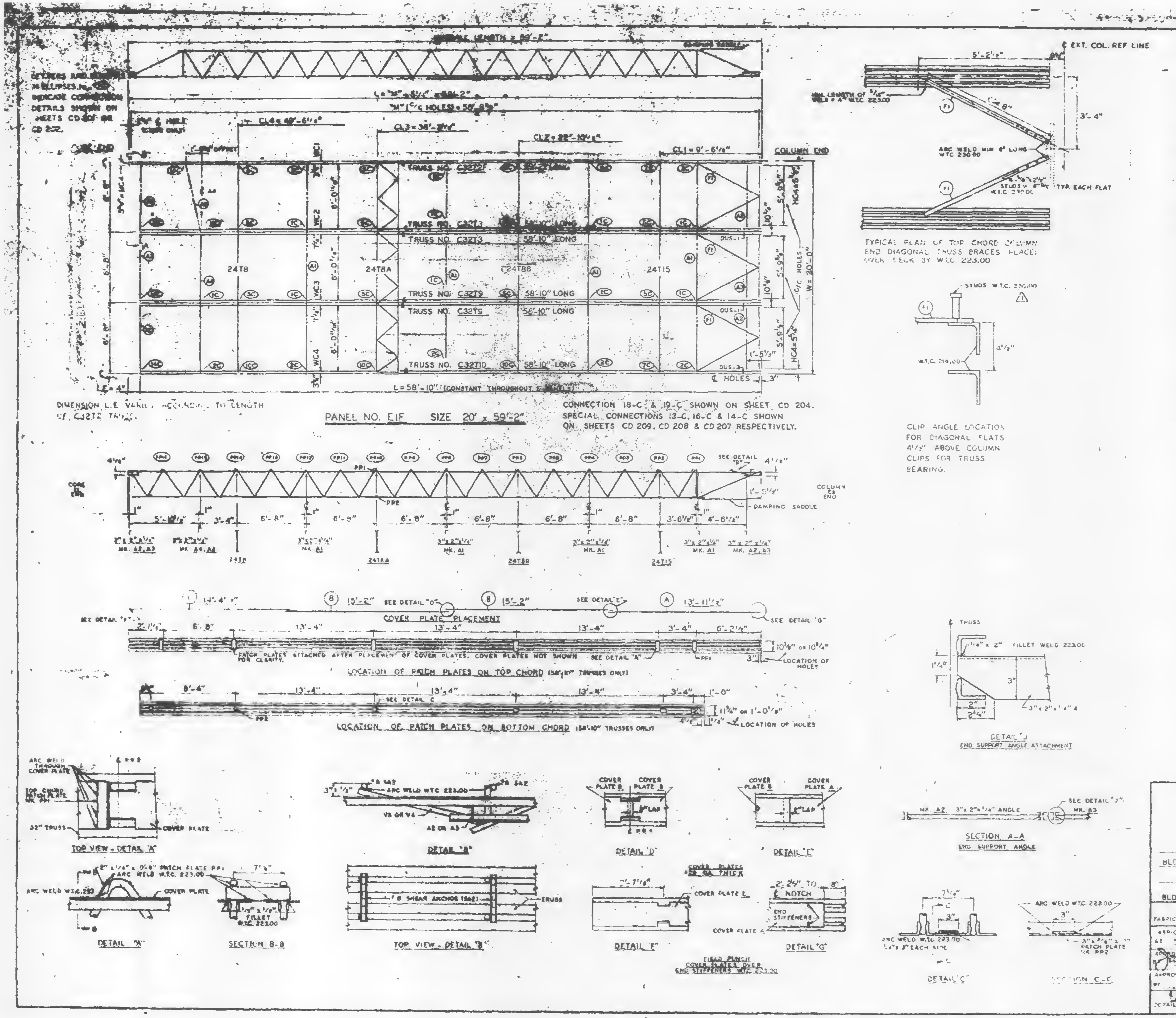


SECTION C-C

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

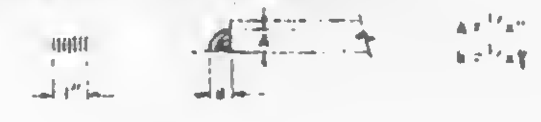
BLDG. A FLOORS 10-11 (NORTH & SOUTH)
69 (NORTH) PANEL EE - 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James White DATE 1/2/70
APPROVED FOR FABRICATION DATE
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO. 7-AB3-11
DRAWN BY [illegible]
DATE JULY 22, 1968
CHECKED BY [illegible]
DATE JULY 22, 1968
FABRICATION CONT. NO. W.T.C. 221
PLATE
IN CHARGE OF [illegible]
SHEET NO. FP E1E


OVERALL LENGTH = 59'-2"
NUMBERS AND LETTERS IN ELLIPSES, INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
CORE END
L = "M" + 6 1/4" = 59'-2"
"M" ℄ C/C HOLES = 58'-8"
CL4 = 48'-6 1/8"
CL3 = 38'-9"
CL2 = 22'-10 1/8"
CL1 = 9'-6 1/8"
COLUMN END
TRUSS NO. C32T2F 59'-2" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
HC4
C/C HOLES
W = 20'-0"
℄ HOLES
L = 58'-10" (CONSTANT THROUGHOUT ...)
DIMENSION L.E VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. EIF SIZE 20' x 59'-2"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
℄ EXT. COL. REF LINE
5'-2 1/2"
3'-4"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG WTC 230.00
STUDS W.T.C. 230.00 TYP. EACH FLAT
F1
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
PP16 PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
SEE DETAIL "B"
COLUMN END
DAMPING SADDLE
5'-10 1/2"
3'-4"
6'-8"
3'-6 1/2"
4'-6 1/2"
3" x 2" x 1/4" MK. A2, A3
3" x 2" x 1/4" MK. A4, A8
3" x 2" x 1/4" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
15'-2"
13'-11 1/2"
13'-4"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
8'-4"
SEE DETAIL C
PP2
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
2" x 1/4" x 0'-8" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
DETAIL "A"
SECTION B-B
1/4" x 1/2" FILLET W.T.C. 223.00
ARC WELD WTC 223.00
#8 SA2
V3 OR V4
A2 OR A3
DETAIL "B"
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATE B
COVER PLATE A
LAP
DETAIL "D"
DETAIL "E"
COVER PLATES #22 GA. THICK
COVER PLATE C
COVER PLATE A
DETAIL "F"
2'-2 3/4" TO 8"
℄ NOTCH
END STIFFENERS
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00
℄ TRUSS
1/4" x 2" FILLET WELD 223.00
3" x 2" x 1/4" 4
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3" x 2" x 1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD W.T.C. 223.00 1/4" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x 3/8" x 0'-3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2F | 1 | C32T2F - 59'-2" | ST 202F |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x [illegible] | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-1[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-[illegible] | ST 403 |
| | [illegible] | 1 | [illegible] x 2 x 1/4" x 13'-4" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-[illegible] | ST 405 |
| DIAGONAL FLATS | F1 | 2 | 1 1/2" x 3/8" x 6'-5" | ST 402 |
| COVER PLATES | A | 3 | 8" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 8" x .0135" x 15'-2" | ST 303 |
| | C | 1 | 8" x .0135" x 14'-4 1/2" | ST 303 |
| ANGLE [illegible] | C1 | 20 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 40[illegible] |
| | C2 | 4 | [illegible] | [illegible] |
| DAMPING SADDLE | DS1 | 2 | [illegible] | ST 298 |
| | DS2 | 1 | [illegible] | [illegible] |
| CONNECTION BAR | [illegible] | 1 | [illegible] | ST [illegible] |
| | CB2 | [illegible] | [illegible] | ST 400 |
| | CB3 | 6 | [illegible] | [illegible] |
| CONNECTION PLATES | F1 | 5 | [illegible] | ST 400 |
| | [illegible] | 1 | [illegible] | [illegible] |
| | F3 | 1 | [illegible] | ST 40[illegible] |
| | F5 | 3 | [illegible] | ST 400 |
| | PF | 1 | [illegible] | ST 401 |
| #8 SHEAR [illegible] | SA2 | 6 | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-8" | ST 41[illegible] |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 414 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



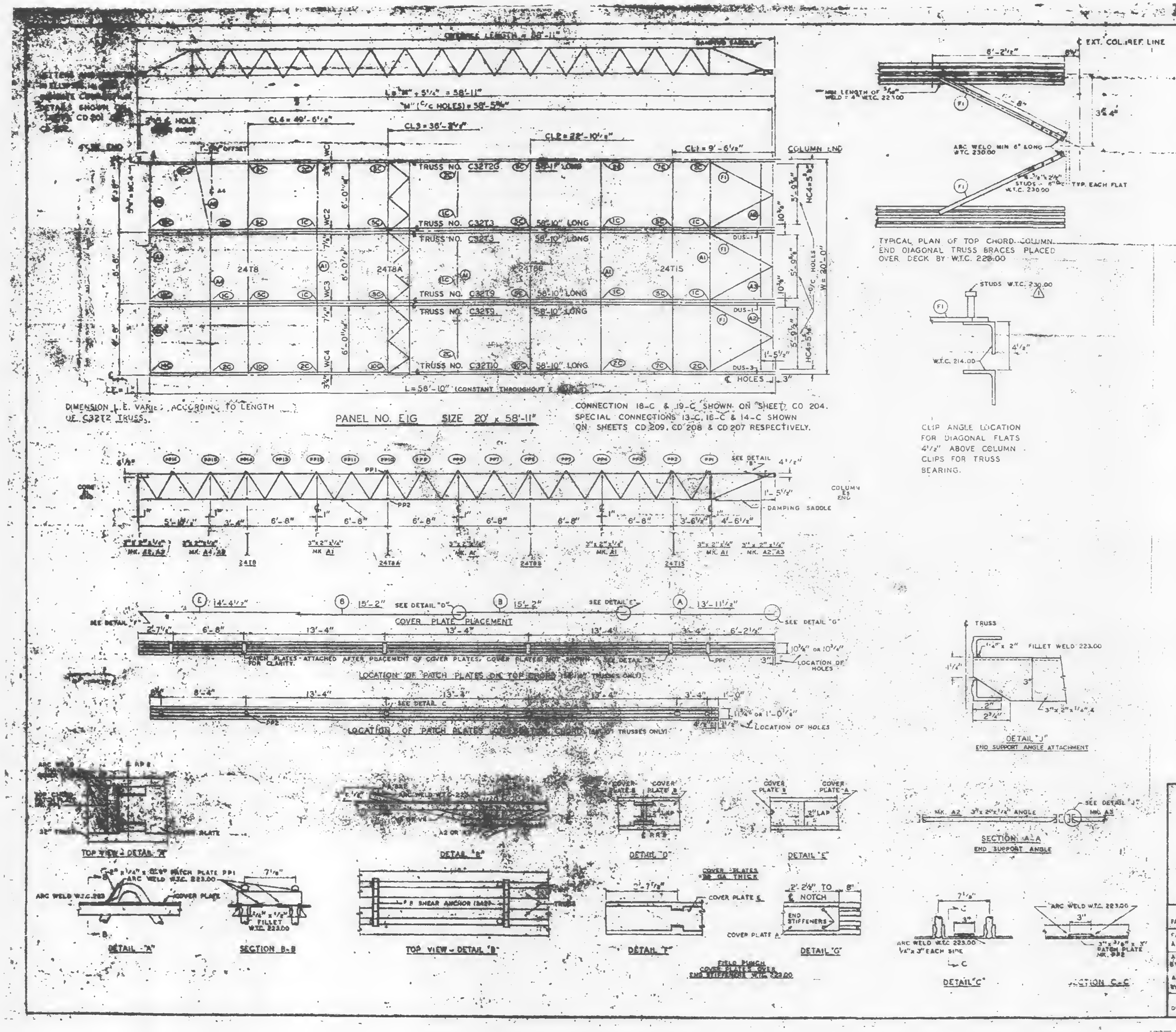
| NO | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 6-18-69 | AS NOTED | GDC |

1 REF. DRWGS
- [illegible] 7-22-68
- [illegible] 10-15-68
- [illegible] 1-3-69
- [illegible] 7-22-68
- [illegible] 10-15-68
- [illegible] 1-5-69
- [illegible] 7-22-68
- [illegible] 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48, 70-71 (N)
PANEL EIF - 20' x 59'-2"
BLDG. B FLOORS 47-48, 70-71 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James White DATE 1/2/70
DRAWN BY [illegible] DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE NOV. 4, 1968
LACLEDE STEEL CO.
DETAILED BY [illegible]
FABRICATOR CONT. NO. W.T.C. 221
SHEET NO. FP EIF



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1G SIZE 20' x 58'-11"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN
ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

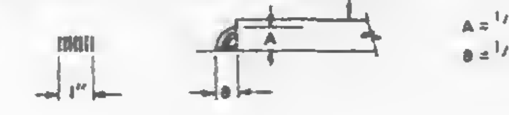
TYPICAL PLAN OF TOP CHORD-COLUMN
END DIAGONAL TRUSS BRACES PLACED
OVER DECK BY W.T.C. 220.00

CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4½" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2G | 1 | C32T2G - 58'-11" | ST 202G |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 208 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3"x 2"x ¼" ANGLE | A1 | 4 | 3"x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2" x ¼" x 5'-1[illegible]" | ST 403 |
| | A3 | 2 | 3"x 2" x ¼" x 5'-1[illegible]" | ST 403 |
| | A4 | 1 | 3"x 2" x ¼" x 1'-3" | ST 403 |
| | A8 | 1 | 3"x 2" x ¼" x 8'-8⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅜" x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-[illegible]" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6¾" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1⅛" ϕ x 1'-3" | ST 400 |
| | CB3 | 8 | 1⅜" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .34" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .34" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x .34" x 0'-9" | ST 401 |
| #8 SHEAR [illegible] SHOP | 9A2 | 6 | #8 REBAR x 0'-4" | ST 410 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 8-18-69 | AS NOTED | G.D.C. |

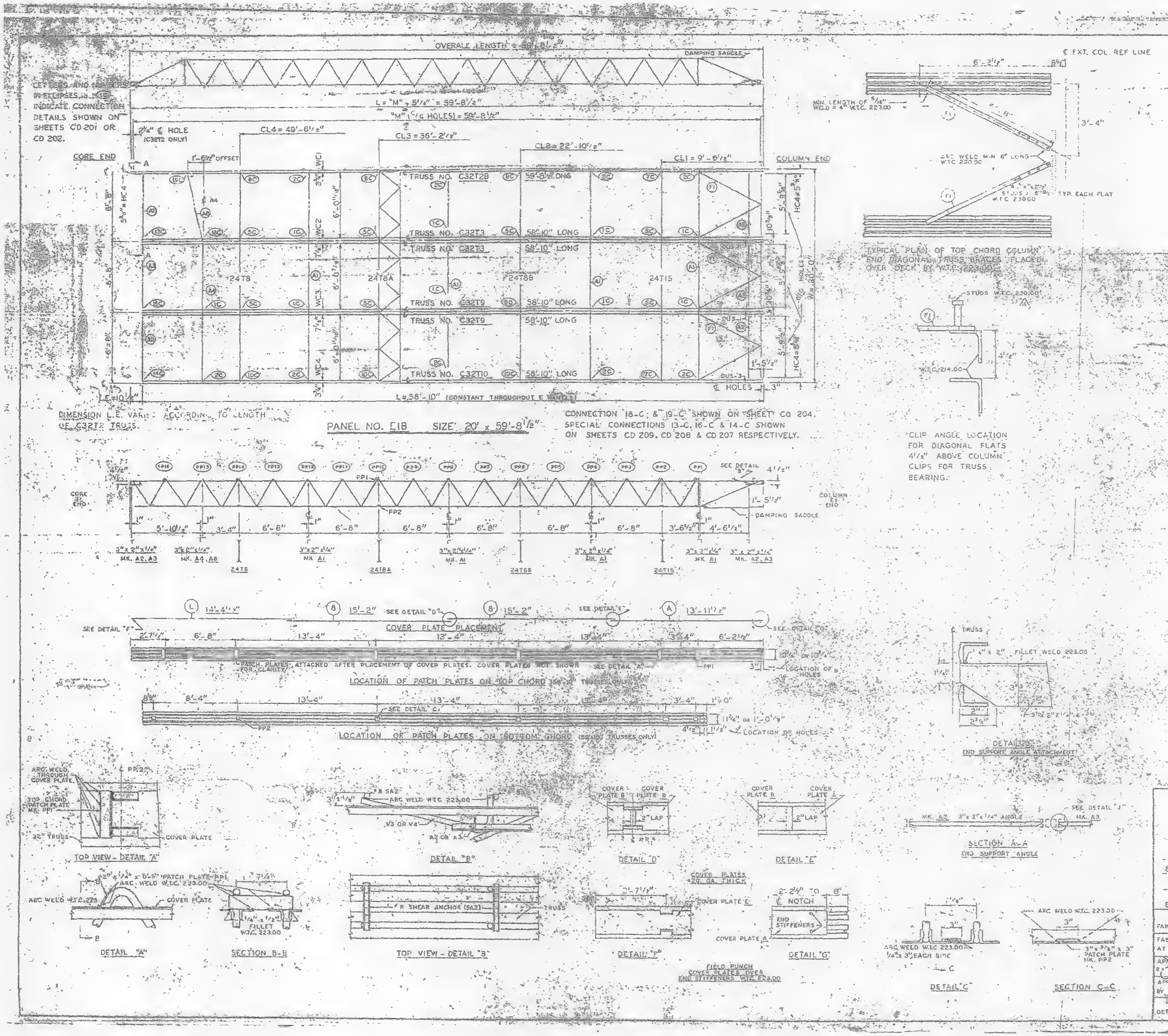
(1) REF. DRWGS.
7-A82-3 & 10 7-22-68
7-A83-11 10-15-68
7-A84-31 1-3-68
7-A84-15 & 16, 39 7-22-68
7-A84-42 & 3 10-15-68
SA-124 1-6-69
7-A81-3 7-22-68
7-A81-6, 7 & 8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N&S)
PANEL E1G - 20' x 58'-11"
BLDG. B FLOORS 39-40 (EAST & WEST) (1)

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-11 | PLATE |
| APPROVED FOR FABRICATION BY James White P.N.Y.A. | DATE 1/2/70 | DRAWN BY: gdc<br>DATE NOV. 1, 1968 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA<br>DATE NOV. 4, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED BY LACLEDE STEEL CO. | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP: E1G |


OVERALL LENGTH = 59'-8 1/2"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES (e.g. 15C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
L = "M" + 5 1/4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-8 1/2"
2 1/4" ℄ HOLE (C32T2 ONLY)
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
1'-6 1/2" OFFSET
TRUSS NO. C32T2B 59'-8 1/2" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
HC4
DUS-1
DUS-3
W = 20'-0"
℄ HOLES
L = 58'-10" (CONSTANT THROUGHOUT E PANELS)
L.E. = 10 1/2"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. E1B SIZE 20' x 59'-8 1/2"
℄ EXT. COL. REF LINE
6'-2 1/2"
8 1/2"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS @ 8" C/C TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
PP16 PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
PP1
PP2
5'-10 1/2" 3'-4" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-6 1/2"
1'-5 1/2"
3" x 2" x 1/4" MK. A2, A3
3" x 2" x 1/4" MK. A4, A8
3" x 2" x 1/4" MK. A1
3" x 2" x 1/4" MK. A2, A3
COVER PLATE PLACEMENT
L 14'-4 1/2"
B 15'-2"
B 15'-2"
A 13'-11 1/2"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
2'-7 1/2" 6'-8" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
10 1/4" or 10 3/4"
LOCATION OF HOLES
8 1/2" 8'-4" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
11 3/4" or 1'-0 1/4"
LOCATION OF HOLES
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
#8 SA2
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
2" x 1/4" x 0'-8" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
COVER PLATE
DETAIL "A"
7 1/2"
1/4" x 1 1/2" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES 22 GA. THICK
2'-7 1/2"
COVER PLATE E
DETAIL "F"
2'-2 1/4" TO 8"
℄ NOTCH
END STIFFENERS
COVER PLATE A
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
TRUSS
1/4" x 2" FILLET WELD 223.00
3" x 2" x 1/4"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3" x 2" x 1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD W.T.C. 223.00 1/4" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x 3/8" x 3" PATCH PLATE MK. PP2
SECTION C-C

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

| REQUIRED MATERIAL FOR PANEL | | | | REF. DRWG |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | |
| FLOOR TRUSSES | T2B | 1 | C32T2B - 59'-8 1/2" | ST 202B |
| | T3 | 2 | C32T3 - 58'-10" | ST 207 |
| | T9 | 2 | C32T9 - 58'-10" | ST 208 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | [illegible] | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-1 9/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-1 7/8" | ST 403 |
| | A4 | 1 | 3" x 2" x 1/4" x [illegible] | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-5 3/8" | ST 403 |
| DIAGONAL FLATS | F1 | [illegible] | 1 1/2" x [illegible] x 6'-9" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | L | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-5 5/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 5/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/16" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x [illegible] | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 410 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

| NO | DATE | REVISION | |
|---|---|---|---|
| ⚠1 | 6-18-69 | AS NOTED | D.D.C. |

⚠1 REF. DRWGS.

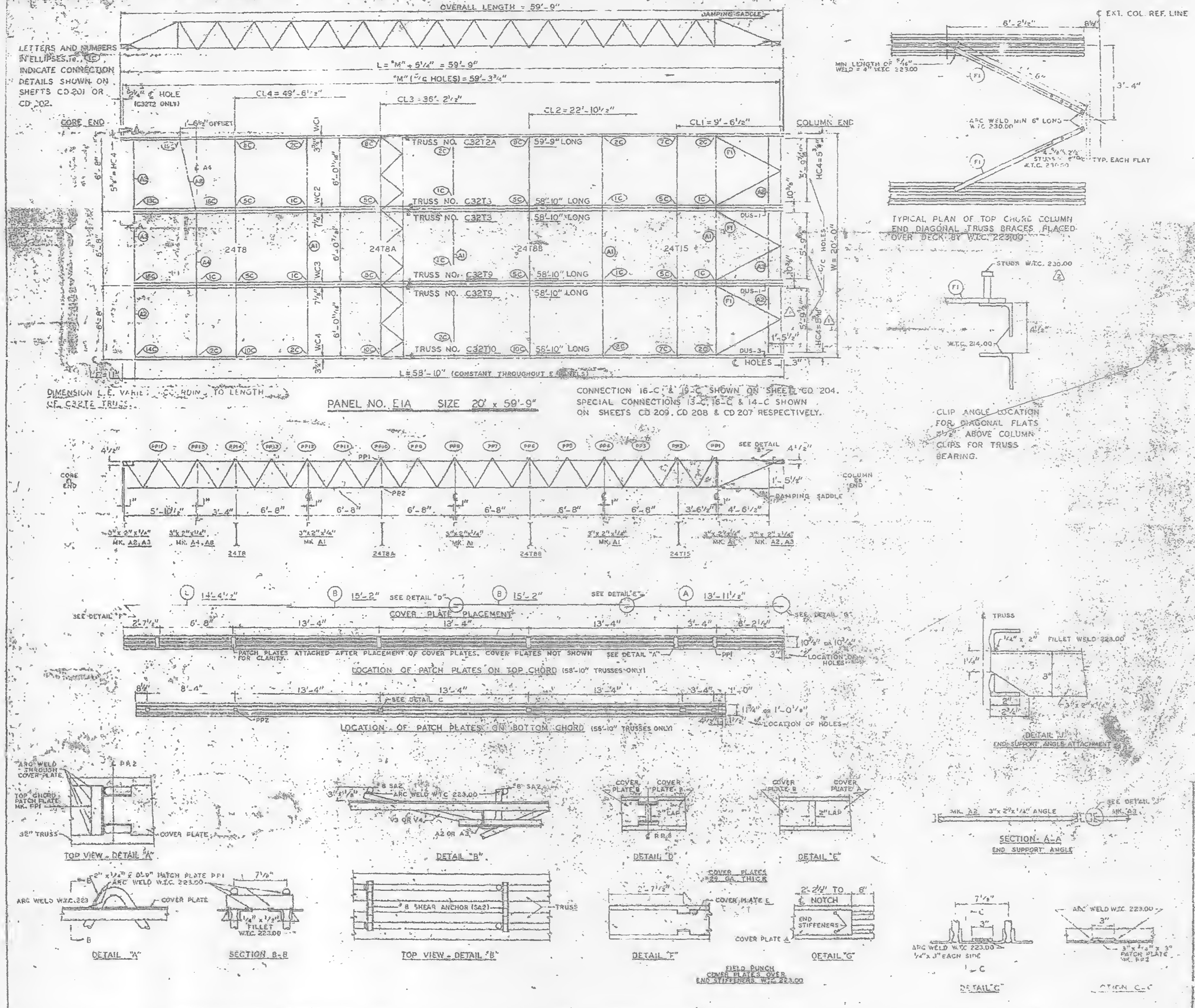
| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-11 | 10-15-68 |
| 7-AB4-3 | 1-3-68 |
| 7-AB4-15 & 16, 39 | 7-22-68 |
| 7-AB4-42 & 3 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-6, 7 & 8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 84-91, 93-106 (N)
PANEL E1B - 20' x 59'-8 1/2"
BLDG. B FLOORS 84-91, 93-106 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-11 | PLATE |
| APPROVED FOR FABRICATION BY James White P.N.Y.A. | DATE 1/2/70 | DRAWN BY gdc DATE NOV. 1, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.H. CHURA DATE NOV. 4, 1968 | IN CHARGE OF PROD. DEP. |
| DETAILED | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. EP E1B |



LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1A SIZE 20' x 59'-9"

CONNECTION 16-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 18-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T2A | 1 | C32T2A - 59'-9" | ST 202A |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-[illegible] | ST [illegible] |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST [illegible] |
| | T8A | 1 | 24T8A - 19'-11" | ST [illegible] |
| | T8B | 1 | 24T8B - 19'-11" | ST [illegible] |
| | T15 | 1 | 24T15 - 19'-11" | ST [illegible] |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-[illegible] | ST 402 |
| | A4 | 1 | [illegible] | [illegible] |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-[illegible] | ST 40[illegible] |
| DIAGONAL FLATS | F1 | 6 | [illegible] x 7'-8" | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2 1/2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 [illegible] | ST 295 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x [illegible] | ST 295 |
| CONNECTION BAR | CB1 | 1[illegible] | 1[illegible] Φ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" Φ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" Φ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0'-7" | ST 400 |
| | P2 | 1 | 4 1/2" x .35" x 0'-[illegible] | ST 400 |
| | P3 | 1 | 4 1/2" x .35" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x [illegible]-6" | ST 400 |
| | P6 | 1 | 4 1/2" x [illegible] x 0'-[illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 13 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 19 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

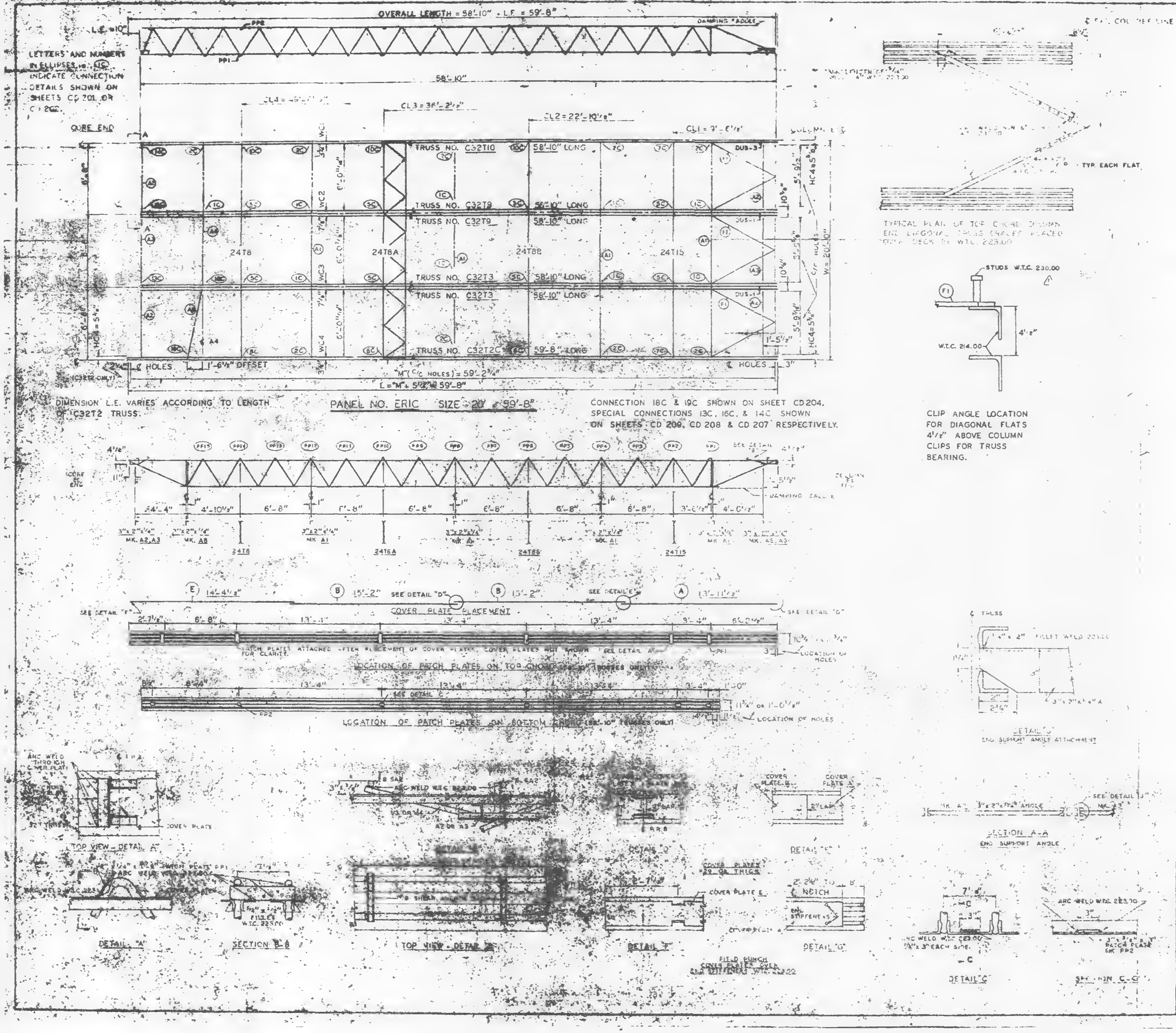
| NO | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 6-18-69 | AS NOTED | G.O.C. |
| 1 | 9-10-68 | AS NOTED | T.A.C. |

2 REF. DRWGS.
7-AB2-34 [illegible] 7-22-68
7-AB3-11 10-15-68
7-AB4-3 [illegible] 7-3-69
7-AB4-15,16 & 17 7-22-68
7-AB6-42 & 3 10-15-68
3AC-124 1-5-68
7-AB1-3 7-22-68
7-AB1-6,7 & 8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 43-59, 60-66, 68, 69 (NORTH) PANEL E1A 20' x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 43-58, [illegible] 2

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR P.C.M.J.A DATE [illegible]
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE [illegible]
DETAILED BY [illegible]
DESIGN DRAWING NO. 7-AB3-[illegible]
DRAWN BY [illegible] DATE JULY 22, 1968
CHECKED BY: T.M.CHURA DATE JULY 22, 1968
FABRICATION CONT. NO. W.T.C. 221
PLATE [illegible]
E1A



LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED [illegible] DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| MATERIAL | MARK | NO. | SIZE | ST. |
|---|---|---|---|---|
| [illegible] | 2C | [illegible] | C32T2C - 59'-8" | [illegible] |
| | [illegible] | [illegible] | C32T3 - 58'-10" | ST 203 |
| | [illegible] | [illegible] | C32T9 - 58'-10" | ST 209 |
| | [illegible] | [illegible] | C32T10 - 58'-10" | ST 210 |
| [illegible] | [illegible] | [illegible] | [illegible] | ST 208 |
| | 16A | [illegible] | [illegible] | ST 208A |
| | [illegible] | [illegible] | [illegible] | ST 208B |
| | [illegible] | [illegible] | 24T15 | ST 215 |
| 3"× 2"×¼" ANGLE | [illegible] | 4 | [illegible] | [illegible] |
| | A2 | [illegible] | [illegible] | [illegible] |
| | A3 | [illegible] | [illegible] | [illegible] |
| | A4 | [illegible] | 3"×2"×¼" × 13'-3" | ST 403 |
| | A8 | 1 | [illegible] | ST 405 |
| DIAGONAL FLATS | F1 | [illegible] | 1½" × ⅝" × 8'-6" | ST 402 |
| COVER PLATES | A | [illegible] | [illegible] | [illegible] |
| | B | [illegible] | [illegible] | [illegible] |
| | L | [illegible] | [illegible] × 14'-4½" | [illegible] |
| ANGLE CLIPS | C1 | 20 | 2"×1½"×¼"× 0'-6" | [illegible] |
| | C2 | 4 | 2½"×1½"×¼" × 6" | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | ST 205 |
| | DUS-3 | [illegible] | [illegible] | [illegible] |
| CONNECTION BAR | [illegible] | [illegible] | [illegible] | [illegible] |
| | CB2 | [illegible] | [illegible] | [illegible] |
| | [illegible] | 6 | [illegible] × 1'-5" | [illegible] |
| CONNECTION PLATES | P1 | 5 | 3½"×⅜"× 8½" | [illegible] |
| | P2 | [illegible] | 4½" × .39" × 0'-9" | [illegible] |
| | P3 | 1 | 4½" × .39" × 1'-0" | [illegible] |
| | P5 | 3 | 4½" × ¼" × 1'-6" | ST 400 |
| | P6 | 1 | 4½" × .39" × 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBARS × 0'-[illegible]" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" × ¼" × 0'-[illegible]" | ST 400 |
| | PP2 | 18 | 3" × ⅜" × 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY[illegible] RODS IN THE E-70 SERIES OR EQUAL.

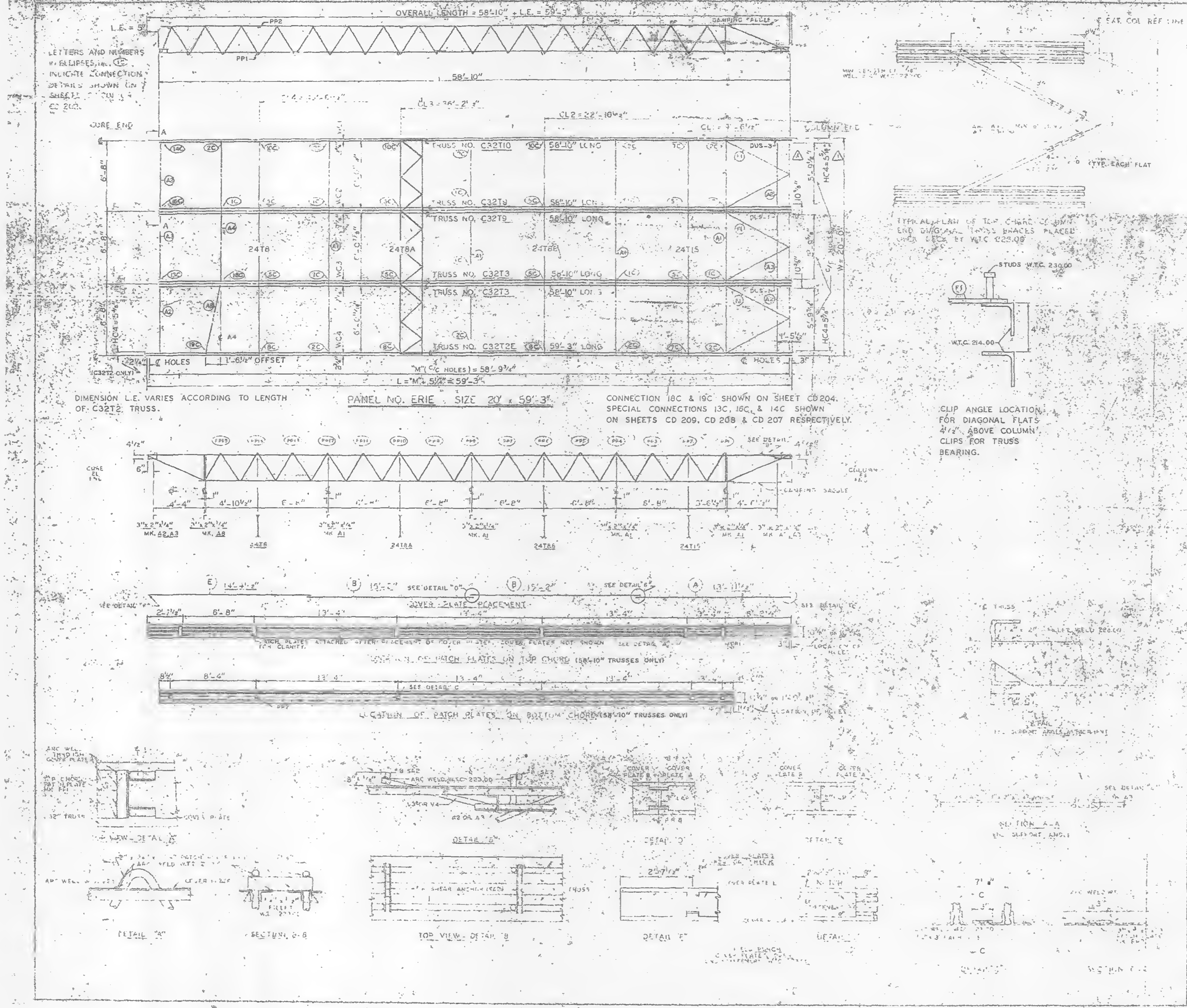
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION [illegible] WELDS TO BE ¼" × 1" FULL THROAT FILLET.

| NO | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-19-69 | AS NOTED | G.D.C. |

⚠1 REF. DRWGS.
7-AB2-[illegible] 7-[illegible]-68
7-AB2-12 [illegible]-15-68
7-AB4-[illegible] [illegible]-3-68
7-AB4-15,16 & 39 7-22-68
7-AB4-[illegible] & 3 10-15-68
[illegible]-124 1-6-69
[illegible] 3 7-22-68
7-AB1-6,7 & 8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
[illegible]
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOOR 50-58, 60-65, 68-74, 80-91, 93-106 (S)
PANEL ERIC [illegible] S
BLDG. B FLOORS 50-58, 60-74, 80-91, 93-106 (EAST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-12
APPROVED FOR FABRICATION BY James White DATE 1/2/70
DRAWN BY [illegible] DATE NOV 4, 1968
CHECKED BY T.M. CHIARA DATE NOV 5, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR
LACLEDE STEEL CO.
DETAILED BY [illegible] WEBER
FABRICATION [illegible] NO. [illegible]
SHEET NO. FP ERIC



LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 203.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIE . SIZE 20' x 59'-3"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

| | | | | |
|---|---|---|---|---|
| [illegible] | 2E | 1 | [illegible] 59'-3" | [illegible] |
| | [illegible] | | 58'-10" | 203 |
| | | | 58'-10" | 209 |
| | [illegible] | | 55'-10" | 210 |
| [illegible] | [illegible] | | | 208 |
| | [illegible] | | | ST 208A |
| | [illegible] | | | 208B |
| | T1 | | [illegible] 15 | 215 |
| 3" x 2" x 1/4" ANGLE | [illegible] | 4 | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | [illegible] |
| | A3 | | [illegible] | [illegible] |
| | A4 | 1 | 3" x 2" x 1/4" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-8 5/8" | ST 405 |
| DIAGONAL FLAT | F1 | 6 | 1 1/2" x 5/8" x 8'-8" | ST 402 |
| COVER PLATES | A | | [illegible] | [illegible] |
| | B | 6 | 9" x .0135" x 13'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 302 |
| ANGLE CLIPS | CL | 20 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 406 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 0'-6" | ST 407 |
| DAMPING SADDLE | DUS-1 | 2 | [illegible] | ST 258 |
| | DUS-3 | 1 | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 5 | 1 3/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 3/8" ϕ x 1'-5" | [illegible] |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 6 1/2" | [illegible] |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | [illegible] |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | [illegible] |
| | P5 | 3 | 4 1/2" x 1/2" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | [illegible] |
| | PP2 | 18 | 3" x 3/16" x 0'-7" | [illegible] |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 2 | 6-19-69 | AS NOTED | G.D.C. |
| 1 | 9-19-68 | AS NOTED | T.M.C. |

| | | |
|---|---|---|
| 2 REF. DWGS. | [illegible] 3 & 10 | 7-22-68 |
| | [illegible] 12 | 10-15-68 |
| | [illegible] | [illegible] |
| | [illegible] 16 & 39 | 7-22-68 |
| | [illegible] 2 & 3 | 10-15-68 |
| | [illegible] 124 | 1-6-68 |
| | [illegible] 3 | 7-22-68 |
| | [illegible] 6, 7 & 8 | 7-22-68 |

PANEL DETAILS

10-11 (SOUTH)

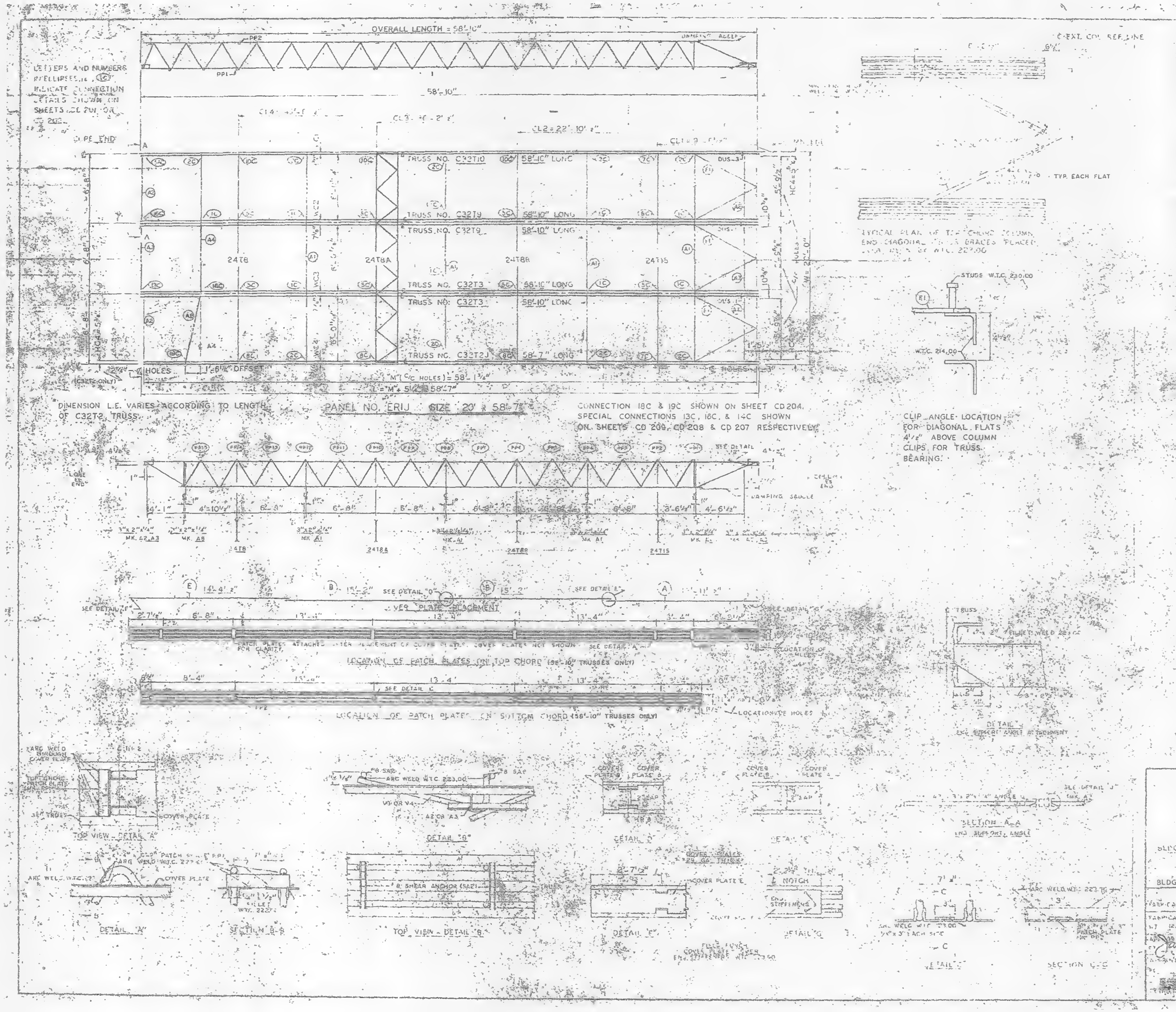
ERIE

12

James White 1/2/70

LACLEDE STEEL CO.

ERIE


OVERALL LENGTH = 58'-10"
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202
58'-10"
CL2 = 22'-10 ½"
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2J 58'-7" LONG
24T8
24T8A
24T8B
24T15
HOLES
1'-6¼" OFFSET
HOLES
"M" (C/C HOLES) = 58'-1¾"
L = "M" + 5¼ = 58'-7"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2J TRUSS
PANEL NO. ERIJ SIZE 20' x 58'-7"
CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 18C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL FLATS BRACES PLACED ...
TYP. EACH FLAT
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL
DAMPING SADDLE
4'-1"
4'-10½"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6½"
4'-6½"
3"x2"x¼" MK. A2,A3
3"x2"x¼" MK. A8
3"x2"x¼" MK. A1
3"x2"x¼" MK. A1
MK. F1
SEE DETAIL "D"
SEE DETAIL "E"
COVER PLATE PLACEMENT
6'-8"
13'-4"
13'-4"
13'-4"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
8'-4"
13'-4"
13'-4"
13'-4"
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
LOCATION OF HOLES
ARC WELD THROUGH COVER PLATE
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 227.00
DETAIL "A"
SECTION B-B
ARC WELD W.T.C. 223.00
#8 SAD
A2 OR A3
DETAIL "B"
#8 SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
COVER PLATE B
COVER PLATE E
DETAIL "D"
COVER PLATE E
DETAIL "E"
COVER PLATE B
DETAIL "C"
END STIFFENERS
DETAIL "G"
SECTION A-A
END SUPPORT ANGLE
TRUSS
FILLET WELD
DETAIL "F"
END SUPPORT ANGLE ATTACHMENT
ARC WELD W.T.C. 223.00
3"x3" EACH SIDE
DETAIL "F"
ARC WELD W.T.C. 223.75
PATCH PLATE
SECTION C-C

| MATERIAL | MK | PCS | SIZE | REF DWG |
|---|---|---|---|---|
| [illegible] | 2J | 1 | C32T2J - 58'-7" | ST [illegible] |
| | T3 | 2 | C32T3 58'-10" | ST 203 |
| | T9 | 2 | C32T9 58'-10" | ST 209 |
| | T10 | 1 | C32T10 58'-10" | ST 210 |
| [illegible] TRUSSES | T8 | 1 | 24T8 - 9'-11" | ST 208 |
| | T8A | 1 | 24T8A - 9'-11" | ST 208A |
| | T8B | 1 | 24T8B - 9'-11" | ST 208B |
| | T15 | 1 | 24T15 - 9'-11" | ST 215 |
| 3"x 2"x ¼" ANGLE | A1 | 4 | 3"x 2"x ¼"x 15'-1½" | ST 403 |
| | A2 | 4 | 3"x 2"x ¼"x 5'-1⅝" | ST 403 |
| | A3 | 2 | 3"x 2"x ¼"x 5'-1⅝" | ST 403 |
| | A4 | 1 | 3"x2"x ¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x ¼" x 6'-8⅝" | ST 405 |
| DIAGONAL FLAT | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x .0135" x 13'-1½" | ST 303 |
| | B | 8 | 9"x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2"x 1½" x ¼"x 0'-8" | ST 400 |
| | C2 | 4 | 2½"x 3½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-R | 2 | [illegible] | ST 288 |
| | DUS-3 | 1 | [illegible] | ST 288 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 6 | 1⅛" ⌀ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅛" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½"x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLETS

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-19-69 | AS NOTED | G.D.C. |

REF. DRWGS

| | |
|---|---|
| 7-A82-34,10 | 7-22-68 |
| 7-A83-12 | 10-15-68 |
| 7-A84-[illegible] | [illegible]-68 |
| 7-A84-15,16 & 39 | 7-22-68 |
| 7-A8A-42 | 10-15-68 |
| SK-124 | 1-5-69 |
| 7-A81-3 | 7-22-68 |
| 7-A81-6,7 & 8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

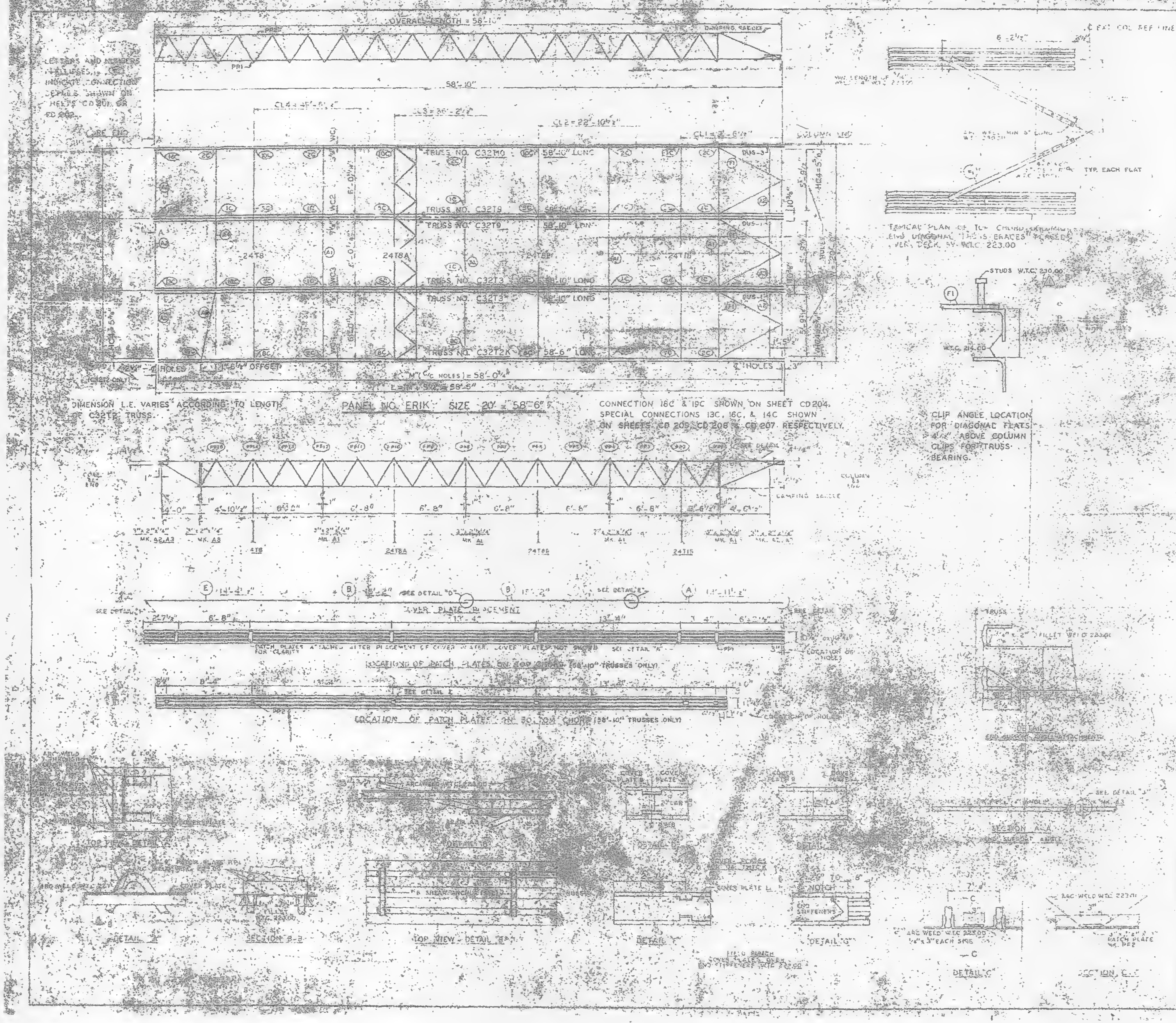
BLDG. A FLOOR 40 (N)
PANEL ERIJ ... B 7

BLDG. B FLOORS 40 (WEST) ⚠1

FABRICATION BY PACIFIC STEEL COMPANY

FABRICATED BY [illegible]
APPROVED FOR FABRICATION BY James White 1/2/70
DESIGN DRAWING NO. 7-A83-12 10-15-68
DRAWN BY [illegible] DATE NOV 4 1968
CHECKED BY [illegible] DATE NOV 5 1968
FABRICATION CONT. NO. 227[illegible]
SHEET NO. FP ERIJ

[redacted]



LETTERS AND NUMBERS IN ELLIPSES, (C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIK SIZE 20' x 58'-6"

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 205, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| [illegible] | | | | |
|---|---|---|---|---|
| [illegible] | MK | PCS | [illegible] | DRAG. |
| [illegible] TRUSSES | [illegible]K | 1 | [illegible]K - 58-6 | [illegible] K |
| | [illegible] | [illegible] | [illegible] 58' 10" | ST 203 |
| | [illegible] | [illegible] | [illegible] 58' 10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| [illegible] | T8 | 1 | 24T8 [illegible] | ST 208 |
| | T8A | 1 | 24T8A [illegible] | ST 208A |
| | T8B | 1 | 24T8B [illegible] | ST 208B |
| | T15 | 1 | 24T15 [illegible] | ST 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x 2"x¼"x 13'-1½" | ST 403 |
| | A2 | 4 | 3"x 2"x¼" x 5'-1⅝" | ST 403 |
| | A3 | 2 | 3"x 2"x¼" x 5'-1⅝" | ST 403 |
| | A4 | 1 | 3"x2"x¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x¼" x 6'-8⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 4 | 1½" x ⅝" x 6'-8" | ST 402 |
| | A | 3 | 9" x .0135" x 13'-11¾" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2½"x1½" x¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½"x 1½" x¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-2 | 2 | [illegible] | ST 293 |
| | DUS-3 | 1 | 3½" x 3½" x ⅞" x 3'-[illegible] | ST 293 |
| CONNECTION BAR | CB1 | 11 | 1" ∅ x 1'-3" | ST 400 |
| | CB2 | 5 | [illegible]" ∅ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ∅ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 75 | 3½" x ⅝" x 0'-8½" | ST 400 |
| | P2 | 14 | 4½" x .30" x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x .30" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P8 | 1 | 4½" x .30" x 0'-9" | ST-401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-8" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-19-69 | AS NOTED | G.D.C. |

⚠ REF. DWGS.

| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-12 | 10-15-68 |
| 7-AB3-11 | 1-3-69 |
| 7-AB4-15,16 & 39 | 7-22-68 |
| 7-AB4-4P & 3 | 10-15-68 |
| SA-124 | 1-6-69 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-6,7 & 8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 45-46 (N)

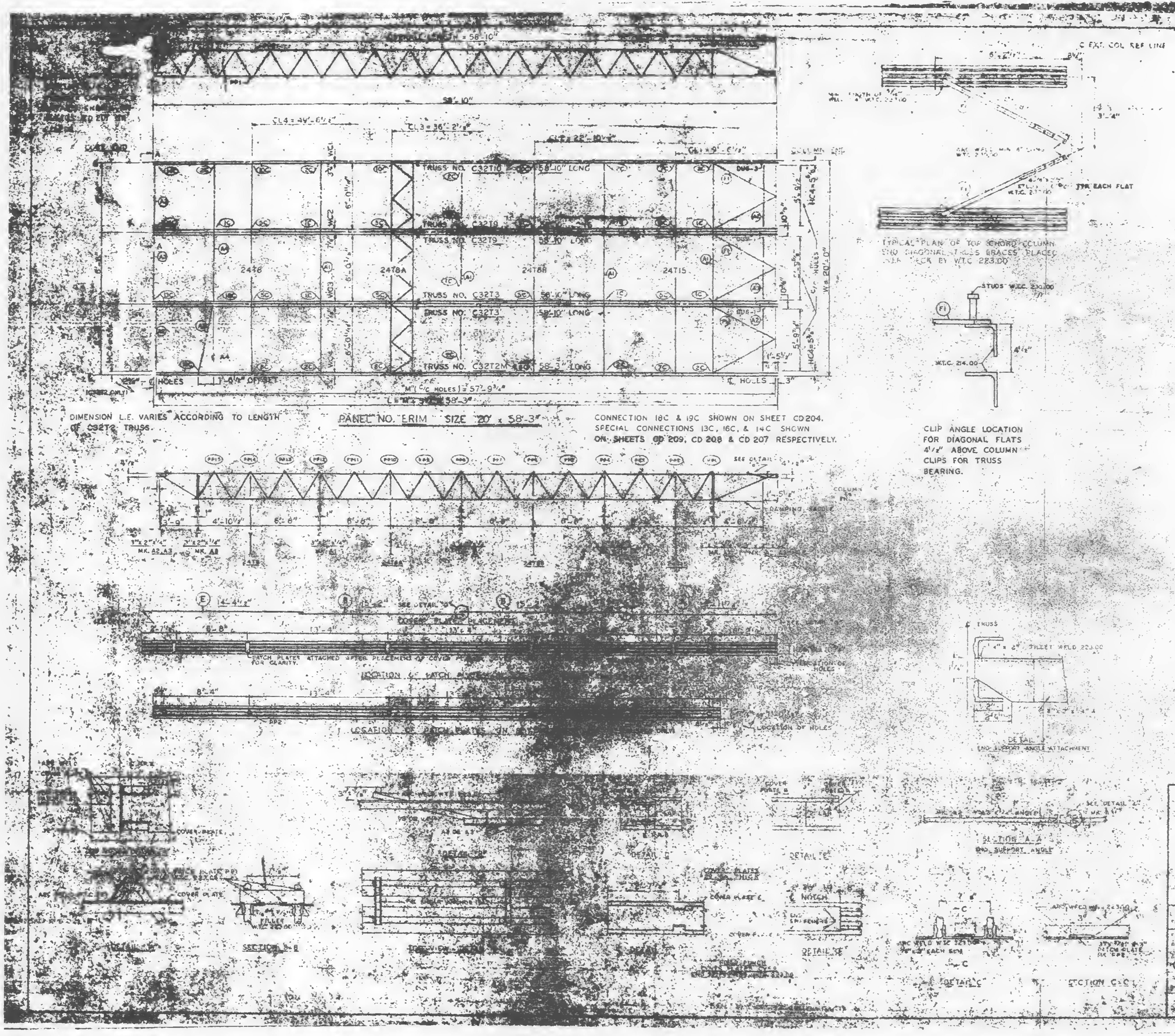
PANEL ERIK 20' x 58'-6"

BLDG. B FLOORS 45-46 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

[illegible] MADISON, ILLINOIS
James White 1/2/70
APPROVED [illegible] FOR FABRICATION
LACLEDE STEEL CO.
DETAILED BY [illegible]

DESIGN DRAWING NO. 7 AB3-12 10-15-68
DRAWN BY [illegible]
DATE NOV 4 [illegible]
CHECKED BY [illegible]
DATE NOV 5 1968
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP ERIK



| REQUIRED MATERIAL PER PANEL | | | | ST DWG |
|---|---|---|---|---|
| MATERIAL | MK | NO. | SIZE | ST DWG |
| FLOOR TRUSSES | T2M | 1 | C32T2M - 58'-3" | ST [illegible] |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | | 24T8B - 19'-11" | ST [illegible] |
| | T15 | | 24T15 - 19'-11" | ST 215 |
| 3"x2"x1/4" ANGLE | A1 | 4 | 3"x2"x1/4"x[illegible] | ST 403 |
| | A2 | 4 | 3"x2"x1/4"x5'-[illegible] | ST [illegible] |
| | A3 | 2 | 3"x2"x1/4"x5'-[illegible] | ST [illegible] |
| | A4 | 1 | 3"x2"x1/4"x13'-3" | ST 403 |
| | A8 | 1 | 3"x2"x1/4"x6'-8" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x3/8"x6'-8" | ST 402 |
| COVER PLATES | A | 2 | 9"x.0135"x13'-11 1/2" | ST 303 |
| | B | 6 | 9"x.0135"x13'-2" | ST 303 |
| | C | 3 | 9"x.0135"x14'-4 1/2" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2"x1 1/2"x1/4"x0'-8" | ST 400 |
| | C2 | 4 | 2 1/2"x1 1/2"x1/4"x8" | ST 400 |
| DAMPING SADDLE | DS-1 | 2 | 3 1/2"x3 1/2"x3/4"x3'-5 1/8" | ST 298 |
| | DS-3 | 1 | 3 1/2"x3 1/2"x3/4"x3'-6 1/8" | ST 299 |
| CONNECTION BAR | CB1 | 4 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 5 | 1 3/8" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 3/8" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2"x3/8"x6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x.39"x0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x.39"x1'-0" | ST 400 |
| | P5 | 3 | 4 1/2"x1/4"x1'-6" | ST 400 |
| | P6 | 1 | 4 1/2"x.39"x0'-9" | ST 401 |
| 5/8 SHEAR ANCHOR | SA2 | 6 | 5/8 NF-AR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 16 | 2"x1/4"x0'-9" | ST 400 |
| | PP2 | 19 | 3"x3/8"x0'-7" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 6-19-69 | AS NOTED | G.D.C. |

⚠1 REF. DRWGS

| | |
|---|---|
| 7-A82-35,10 | 7-22-68 |
| 7-A83-12 | 10-15-68 |
| 7-A84-37 | 1-3-68 |
| 7-A84-15,16 & 38 | 7-22-68 |
| 7-A84-42 & 3 | 10-15-68 |
| SK-124 | 1-6-69 |
| 7-A81-3 | 7-22-68 |
| 7-A81-6,7 & 8 | 7-22-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 72-73 (N)

PANEL ER[illegible] 58'-3"

BLDG. B FLOORS 72-73 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

James White DATE 1/2/70

APPROVED FOR FABRICATION FOR FABRICATOR DATE

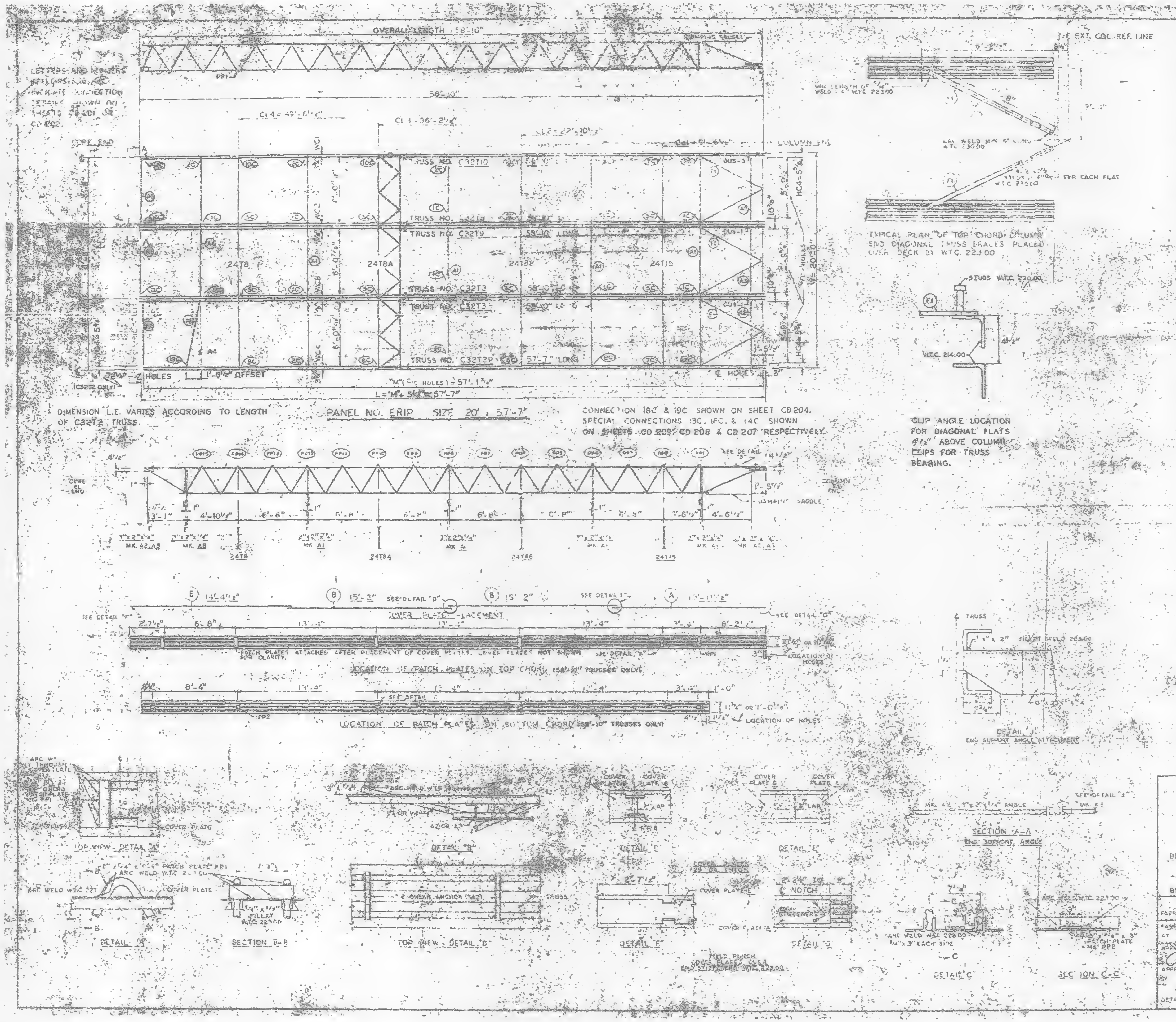
DESIGN DRAWING 7-A83-12 10-15-68

DRAWN BY DATE NOV 4 1968

CHECKED BY E.M.CH[illegible] DATE NOV 5 1968

FABRICATION CONTROL W.T.C. 22[illegible]

ERIM



PANEL NO. ERIP SIZE 20' x 57'-7"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

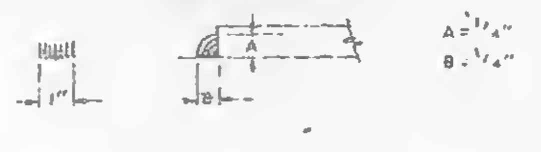
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

| REQUIRED MATERIAL SCHEDULE | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PC | SIZE | [illegible] |
| FLOOR TRUSSES | T2P | 1 | C32T2P - 57'-7" | [illegible] |
| | T3 | [illegible] | C32T3 58'-10" | 203 |
| | T9 | [illegible] | C32T9 58'-10" | 209 |
| | T10 | [illegible] | C32T10 - 58'-10" | [illegible] |
| BRIDGING TRUSSES | TR | [illegible] | 24T8 | 208 |
| | T8A | 1 | 24T8A | 208A |
| | T8B | 1 | 24T8B | ST 208B |
| | TC | [illegible] | 24T15 | [illegible] |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | [illegible] |
| | A3 | | [illegible] | [illegible] |
| | A4 | 1 | 3" x 2" x 1/4" x 13'-3 | ST 403 |
| | A8 | 1 | 2" x 2" x 1/4" x 6'-8 5/8" | ST 405 |
| DIAGONAL FLATS | F1 | 8 | 1 1/2" x 5/8" x 8'-8 | ST 402 |
| COVER PLATES | A | [illegible] | 9" x .0035" x [illegible] | [illegible] |
| | B | 6 | 9" x .0035" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0035" x 14'-4 1/2" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DS-4 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-8 3/4" | ST 298 |
| | DS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-7 1/2" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 8 | 1 1/4" ⌀ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 5/8" x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible]" | ST 400 |
| PATCH PLATES | PP1 | 18 | 3" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-7" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

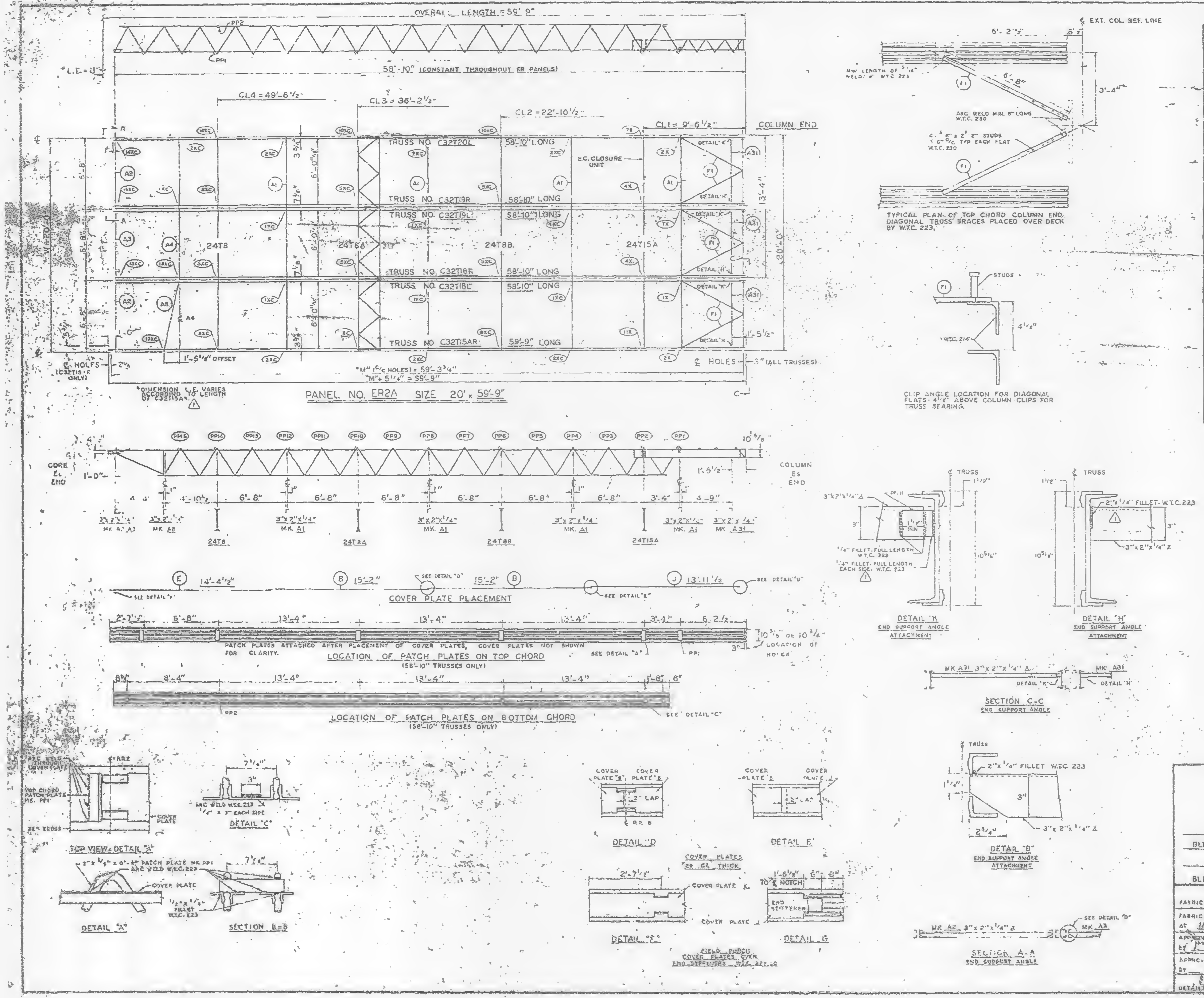
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 5-19-69 | AS NOTED | GDC |

⚠1 REF. DWGS.
[illegible] 2 & 10 — [illegible]
[illegible]-12 — [illegible]
[illegible] — [illegible]
[illegible] 15, 16 & 30 — [illegible]
[illegible] 42 & 3 — [illegible]
[illegible] — 1-6-69
[illegible] 3 — [illegible]
[illegible] 6, 7 & 8 — [illegible]

FLOOR PANEL DETAILS
[illegible]
[illegible] CENTER
THE [illegible] NEW YORK [illegible]
BLDG. A FLOOR 74 (N)
[illegible] 7 7
BLDG. B FLOORS 74 (WEST) ⚠1
FABRICATION BY [illegible] STEEL [illegible]
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION
James White
DATE 1/2/70
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATION
DATE
[illegible] STEEL CO.
DETAILED BY A. CARL WEBER
DRAWN BY [illegible] NOV [illegible] 1968
CHECKED BY [illegible]
DATE NOV 5 1968
FABRICATION CONT. NO.
W.T.C. 321
F ERIP


OVERALL LENGTH = 59'-9"
PP2
PP1
"L.E.=1'"
58'-10" (CONSTANT THROUGHOUT ER PANELS)
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T20L 58'-10" LONG
TRUSS NO. C32T19R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T15AR 59'-9" LONG
B.C. CLOSURE UNIT
24T8
24T8A
24T8B
24T15A
DETAIL "K"
DETAIL "H"
1'-5 1/2" OFFSET
℄ HOLES
3" (ALL TRUSSES)
℄ HOLES (C32T15 F ONLY)
"M" (℄/℄ HOLES) = 59'-3 3/4"
"M" + 5 1/4" = 59'-9"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T15AR
PANEL NO. ER2A SIZE 20' x 59'-9"
CORE EL END
COLUMN ES END
3"x2"x1/4" MK A3
3"x2"x1/4" MK A8
3"x2"x1/4" MK. A1
3"x2"x1/4" MK A31
COVER PLATE PLACEMENT
14'-4 1/2"
15'-2"
13'-11 1/2
SEE DETAIL "D"
SEE DETAIL "E"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)
SEE DETAIL "A"
SEE DETAIL "C"
10 3/8" OR 10 3/4" LOCATION OF HOLES
TOP VIEW: DETAIL "A"
DETAIL "C"
DETAIL "A"
SECTION B-B
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223
EXT. COL. RET. LINE
TYPICAL PLAN OF TOP CHORD COLUMN END. DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
ARC WELD MIN. 6" LONG W.T.C. 230
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET-W.T.C. 223
SECTION C-C END SUPPORT ANGLE
DETAIL "B" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET W.T.C 223
SECTION A-A END SUPPORT ANGLE
MK A2 3"x2"x1/4"
SEE DETAIL "B"

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG |
| FLOOR TRUSSES | T15AR | 1 | C32T15AR x 59'-9" | ST 215AL |
| | T18L | 1 | C32T18L x 58'-10" | ST 218L |
| | T18R | 1 | C32T18R x 58'-10" | |
| | T19L | 1 | C32T19L x 58'-10" | ST 219L |
| | T19R | 1 | C32T19R x 58'-10" | |
| | T20L | 1 | C32T20L x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | ST 208 |
| | T8A | 1 | 24T8A x 19'-11" | ST 208A |
| | T8B | 1 | 24T8B x 19'-11" | ST 208B |
| | T15A | 1 | 24T15A x 19'-11" | ST 215A |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | [illegible] | ST 403 |
| | A2 | 2 | [illegible] | ST 403 |
| | A3 | | [illegible] | ST 403 |
| | A4 | 1 | [illegible] | ST 403 |
| | A8 | 1 | [illegible] | [illegible] |
| | A31 | 3 | [illegible] | ST 410 |
| CLOSURE PLATES | PF-11 | 3 | 3" x 1/4" x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x [illegible] x 8'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-5" | ST 400 |
| COVER PLATES | B | 6 | 9" x .0135" x 5'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11 1/2" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | . | 1'-4" O x 6'-6 1/2" | ST 215A |
| ANGLE CLIPS | C1 | 20 | [illegible] x .25" x 6" | ST 400 |
| | C2 | 4 | [illegible] x .25" x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-0" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" Ø x 1'-5" | ST 400 |
| | CB2 | 6 | 1 3/4" Ø x 1'-3 | ST 400 |
| | CB3 | 6 | 1 3/8" Ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | [illegible] | ST 430 |
| | P2 | 1 | [illegible] x .39" x 0'-9" | ST 410 |
| | P3 | 1 | [illegible] x .39" x 1'-0" | ST 40[illegible] |
| | P5 | 3 | [illegible] | ST [illegible] |
| | P6 | 1 | [illegible] x .39" x 0'-9 | ST 461 |
| | P8 | 8 | [illegible] | ST 41[illegible] |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET

| NO. | DATE | REVISION | |
|---|---|---|---|
| | | | |
| | | | |
| 2 | 7-1-69 | AS NOTED | |
| 1 | 2-4-69 | AS NOTED | |

REF. DRWG.

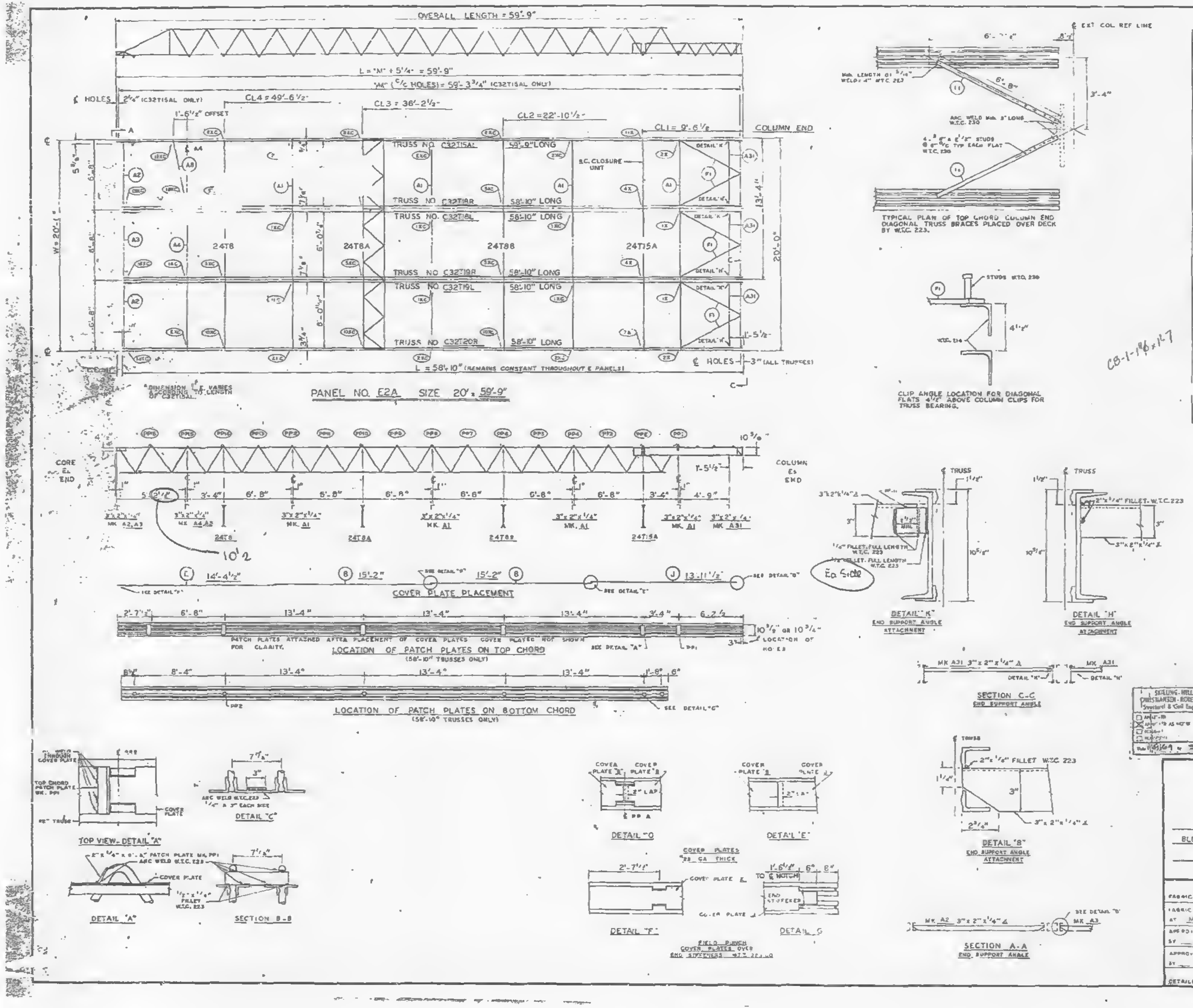
| | |
|---|---|
| 7-AB3-?? | 10-4-68 |
| 7-AB3-24 | 8-15-68 |
| 7-AB1-14, 17, 18 & 19 | 10-4-68 |
| 7-AB2-3 | 7-22-68 |
| 7-AB2-14 | 10-4-68 |
| SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL [illegible] 20' x 59'-9
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-[illegible] PLATES | |
| APPROVED FOR FABRICATION BY [illegible] FOR PONYA | DATE [illegible] | DRAWN BY [illegible] DATE DEC. 5, 1968 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY [illegible] DATE DEC. 5, 1968 | IN CHARGE OF PROD. DEV. |
| DETAILED LACLEDE STEEL CO. | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FD ER2A |


OVERALL LENGTH = 59'-9"
L = "M" + 5¼" = 59'-9"
"M" (℄ HOLES) = 59'-3¾" (C32T15AL ONLY)
℄ HOLES
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
COLUMN END
TRUSS NO. C32T15AL 59'-9" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T19R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T20R 58'-10" LONG
B.C. CLOSURE UNIT
24T8
24T8A
24T8B
24T15A
W = 20'-1"
20'-0"
L = 58'-10" (REMAINS CONSTANT THROUGHOUT E PANELS)
℄ HOLES
PANEL NO. E2A SIZE 20' x 59'-9"
CORE END
COLUMN END
10'2
COVER PLATE PLACEMENT
14'-4½"
15'-2"
15'-2"
13'-11½"
LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
CB-1-1⅝x1'-7
Ea. Side
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT
SECTION C-C
END SUPPORT ANGLE
DETAIL "B"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "C"
DETAIL "A"
SECTION B-B
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T15AL | 1 | C32T15AL x 59'-9" | ST 215AL |
| | T18L | 1 | C32T18L x 58'-10" | ST 218L |
| | T18R | 1 | C32T18R x 58'-10" | |
| | T19L | 1 | C32T19L x 58'-10" | ST 219L |
| | T19R | 1 | C32T19R x 58'-10" | |
| | T20R | 1 | C32T20R x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | ST 208 |
| | T8A | 1 | 24T8A x 19'-11" | ST 208A |
| | T8B | 1 | 24T8B x 19'-11" | ST 208B |
| | T15A | 1 | 24T15A x 19'-11" | ST 215A |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3"x2"x¼"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x¼"x5'-11¹⁵⁄₁₆" | ST 403 |
| | A3 | 1 | 3"x2"x¼"x5'-11¾" | ST 403 |
| | A4 | 1 | 3"x2"x¼"x13'-3" | ST 403 |
| | A8 | 1 | 3"x2"x¼"x8'-6⅝" | ST 405 |
| | A31 | 3 | 3"x2"x¼"x5'-8⅛" | ST 410 |
| | | | | |
| CLOSURE PLATES | PT 11 | 3 | 3"x¼" x 0'-2¾" | ST 412 |
| DIAGONAL FLATS | F1 | 8 | 1½" x ¼" x 8'-6" | ST 402 |
| PATCH PLATES | PP1 | 1A | 2"x¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x⅜" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x.0135" x 15'-2" | ST 303 |
| | E | 3 | 9"x.0135" x 14'-4½" | ST 303 |
| | J | 3 | 9"x.0135" x 13'-11½" | S 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1'-4" D x 9'-8½" | ST 215A |
| ANGLE CLIPS | C1 | 20 | 2"x1½"x.25"x 6" | ST 400 |
| | C2 | 4 | 2½"x1½"x.25"x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | ②1 | 1" Ø x 1'-3" | ST 400 |
| | CB2 | 8 | 1¼" Ø x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" Ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 8½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-8" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| | P9 | 9 | 3" x ½" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 225.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x ¼" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

| REF. DRWG. | |
|---|---|
| 7-A83-32 | 10-4-68 |
| 7-A83-24 | 9-15-68 |
| 7-A81-14, 17, 18 & 19 | 10-4-68 |
| 7-A82-3 | 7-22-68 |
| 7-A82-14 | 10-4-68 |
| SA-124 | 10-11-68 |

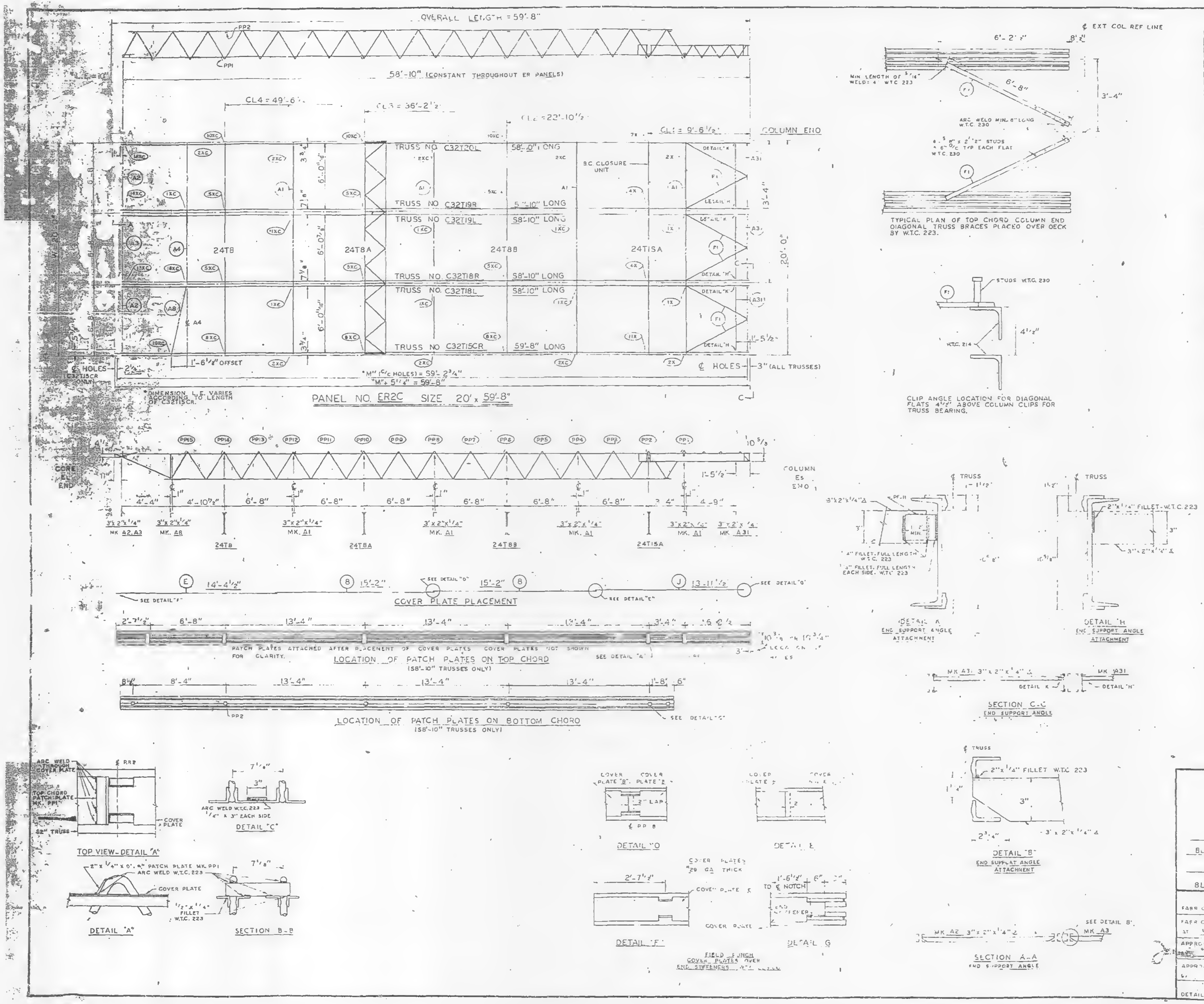
SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ REVISE
☐ REJECTED
Date 11/6/69 By SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

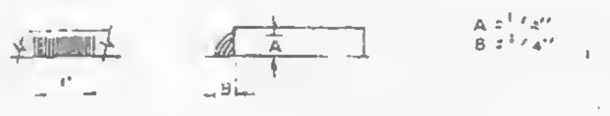
PANEL E2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-32 PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A. DATE
DRAWN BY L.R.
DATE DEC 5, 1968
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE
CHECKED BY T.N. THURA
DATE DEC 5, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. PERCA
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP E2A


OVERALL LENGTH = 59'-8"
PP2
PP1
58'-10" (CONSTANT THROUGHOUT ER PANELS)
CL4 = 49'-6"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T20L 58'-10" LONG
TRUSS NO. C32T19R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T15CR 59'-8" LONG
B.C. CLOSURE UNIT
24T8
24T8A
24T8B
24T15A
DETAIL "K"
DETAIL "H"
20'-0"
13'-4"
1'-5 1/2"
1'-6 1/4" OFFSET
℄ HOLES
3" (ALL TRUSSES)
℄ HOLES C32T15CR ONLY
"M" (℄/℄ HOLES) = 59'-2 3/4"
"M" + 5 1/4" = 59'-8"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T15CR.
PANEL NO. ER2C SIZE 20' x 59'-8"
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
10 5/8"
COLUMN END
CORE END
4'-4" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-4" 4'-9"
3"x2"x1/4" MK. A2, A3
3"x2"x1/4" MK. A8
3"x2"x1/4" MK. A1
3"x2"x1/4" MK. A31
COVER PLATE PLACEMENT
14'-4 1/2" 15'-2" 15'-2" 13'-11 1/2"
SEE DETAIL "F"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
2'-7 1/2" 6'-8" 13'-4" 13'-4" 13'-4" 3'-4" 15'-2 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
SEE DETAIL "A"
8 1/4" 8'-4" 13'-4" 13'-4" 13'-4" 1'-8" 6"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
SEE DETAIL "C"
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
COVER PLATE
58" TRUSS
TOP VIEW - DETAIL "A"
2"x1/4"x0'-9" PATCH PLATE MK. PP1 ARC WELD W.T.C. 223
1/2" x 1/4" FILLET W.T.C. 223
DETAIL "A"
SECTION B-B
7 1/4"
3"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
DETAIL "C"
COVER PLATE "B"
COVER PLATE "E"
℄ PP 8
DETAIL "D"
DETAIL "E"
COVER PLATES #29 GA THICK
2'-7 1/2"
DETAIL "F"
DETAIL G
FIELD PUNCH COVER PLATES OVER END STIFFENERS
6'-2 1/2"
8 1/2"
℄ EXT COL REF LINE
MIN LENGTH OF 5/16" WELD: 4" W.T.C. 223
6'-8"
3'-4"
ARC WELD MIN. 8" LONG W.T.C. 230
5/8" x 2 1/2" STUDS 6" C/C TYP EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
℄ TRUSS
3"x2"x1/4"
1/4" FILLET FULL LENGTH W.T.C. 223
1/4" FILLET FULL LENGTH EACH SIDE W.T.C. 223
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET W.T.C. 223
3"x2"x1/4"
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK. A3 3"x2"x1/4"
MK. A31
DETAIL "K"
DETAIL "H"
SECTION C-C END SUPPORT ANGLE
2"x1/4" FILLET W.T.C. 223
3"x2"x1/4"
DETAIL "B" END SUPPORT ANGLE ATTACHMENT
MK. A2 3"x2"x1/4"
SEE DETAIL "B"
MK. A3
SECTION A-A END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T15CR | 1 | C32T15CR x [illegible] | ST 215CL |
| | T18L<br>T18R | | C32T18L x [illegible]<br>C32T18R x [illegible] | ST 218L |
| | T19L<br>T19R | | C32T19L x 58'-10"<br>C32T19R x 58'-10" | ST 219L |
| | T20L | | C32T20L x [illegible] | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-[illegible] | BT 208 |
| | T8A | 1 | 24T8A x 19'-[illegible] | BT 208A |
| | T8B | 1 | 24T8B x 19'-11" | BT 208B |
| | T15A | 1 | 24T15A x 19'-11" | BT 215A |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x2"x1/4"x [illegible] | ST 403 |
| | A2 | | 3"x2"x1/4"x [illegible] 6" | ST 403 |
| | A3 | | 3"x2"x1/4"x [illegible] | ST 403 |
| | A4 | | 3"x2"x1/4"x [illegible] | ST 403 |
| | A8 | | 3"x2"x1/4"x [illegible] 8 5/8" | ST 405 |
| | A31 | 3 | 3"x2"x1/4"x [illegible] | ST 416 |
| CLOSURE PLATES | PF11 | 1 | 3"x [illegible] | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2"x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135"x 14'-4 1/2" | ST 303 |
| | J | 3 | 9"x .0135"x 13'-11 1/2" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1 1/4" Ø x 6'-6 1/2" | BT 215A |
| ANGLE CLIPS | C1 | 20 | 2"x 1 1/2"x.25"x 6" | ST 400 |
| | C2 | 4 | 2 1/2"x 1 1/2"x.25"x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" Ø x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" Ø x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" Ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2"x [illegible] 8"x 8 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2"x 1/4"x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2"x .39"x 0'-9" | ST 401 |
| | P9 | 6 | 3"x 1/2"x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (IX)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET



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| | | | |
| NO. | DATE | REVISION | BY |

REF. DRWG.

| | |
|---|---|
| 7-A83-33 | 10-4-68 |
| 7-A83-24 | 8-15-68 |
| 7-A81-14, 17, 18 & 19 | 10-4-68 |
| 7-A82-3 | 7-22-68 |
| 7-A82-14 | 10-4-68 |
| SA-124 | 10-11-68 |

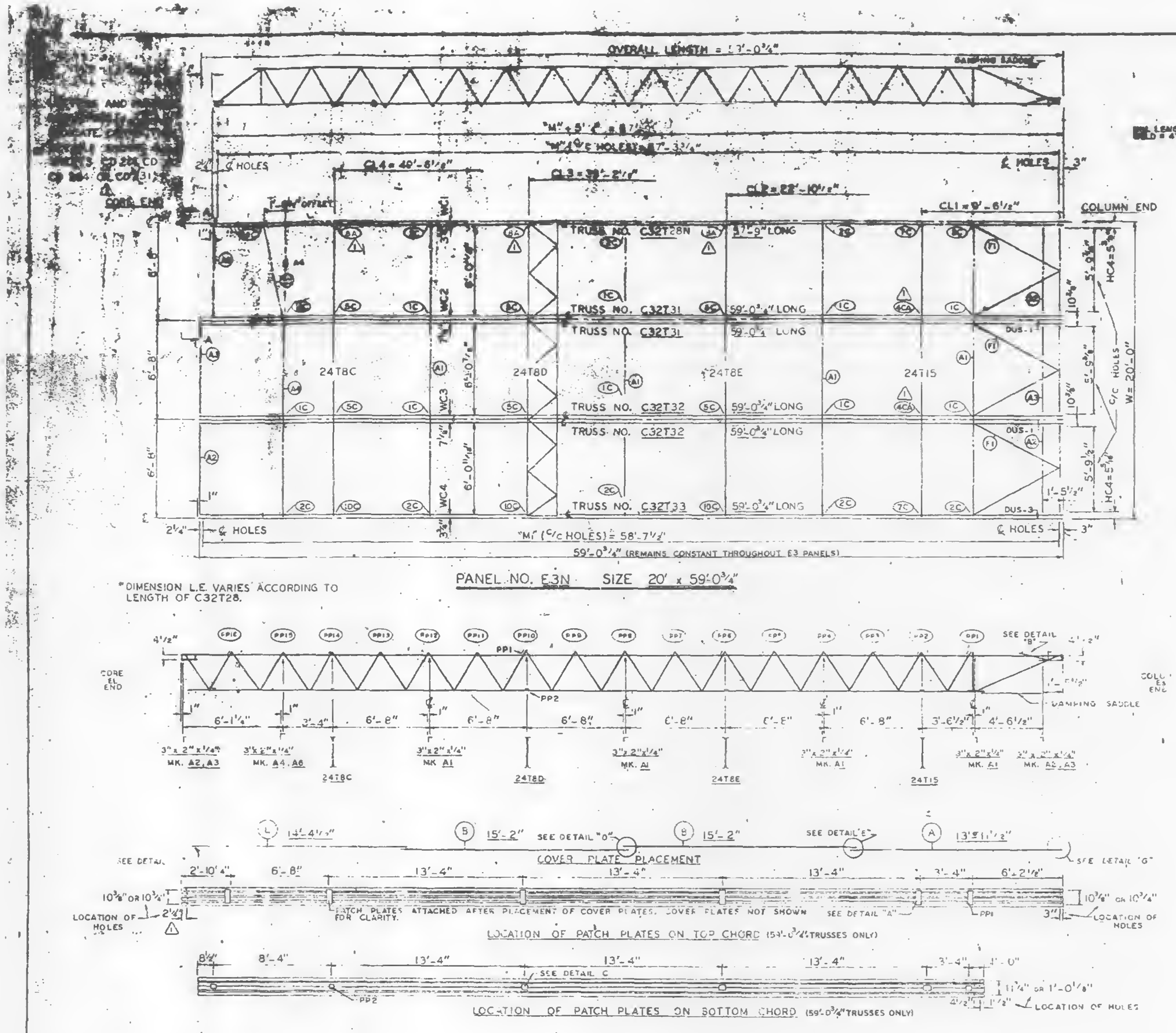
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL ER2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY [illegible] STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] DATE 6/6/69
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
DETAILED BY A.C. WEBER
DESIGN DRAWING NO. 7-A83-33 PLATE
DRAWN BY [illegible] DATE APRIL 28, 1968
CHECKED BY T.M. CHURA DATE APRIL 28, 1968
IN CHARGE OF PROD. [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP ER2C


OVERALL LENGTH = 67'-0¾"
DAMPING SADDLE
"M" + 5' (¢ + 8'-7¾")
"M" (¢ HOLES) = 67'-3¼"
¢ HOLES
CL4 = 40'-6½"
CL3 = 30'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T28N 57'-9" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T33 59'-0¾" LONG
24T8C
24T8D
24T8E
24T15
WC2
WC3
WC4
HC4 = 5'-8"
C/C HOLES
W = 20'-0"
DUS-1
DUS-3
"M1" (C/C HOLES) = 58'-7½"
59'-0¾" (REMAINS CONSTANT THROUGHOUT E3 PANELS)

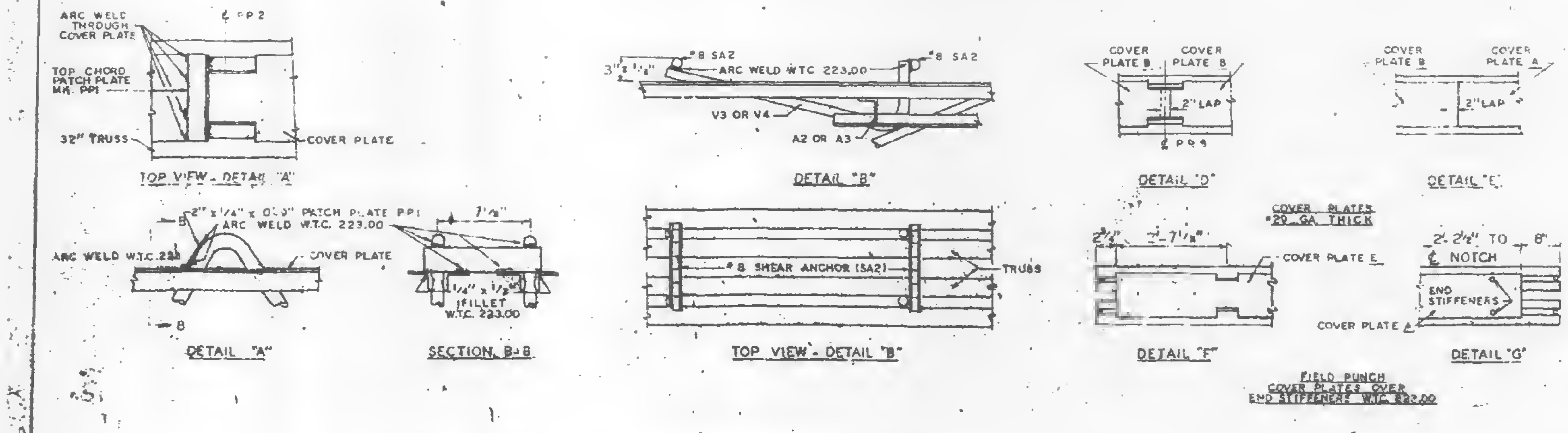
PANEL NO. E3N SIZE 20' x 59'-0¾"

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)



TOP VIEW - DETAIL "A"

DETAIL "A"

SECTION B-B

DETAIL "B"

TOP VIEW - DETAIL "B"

DETAIL "D"

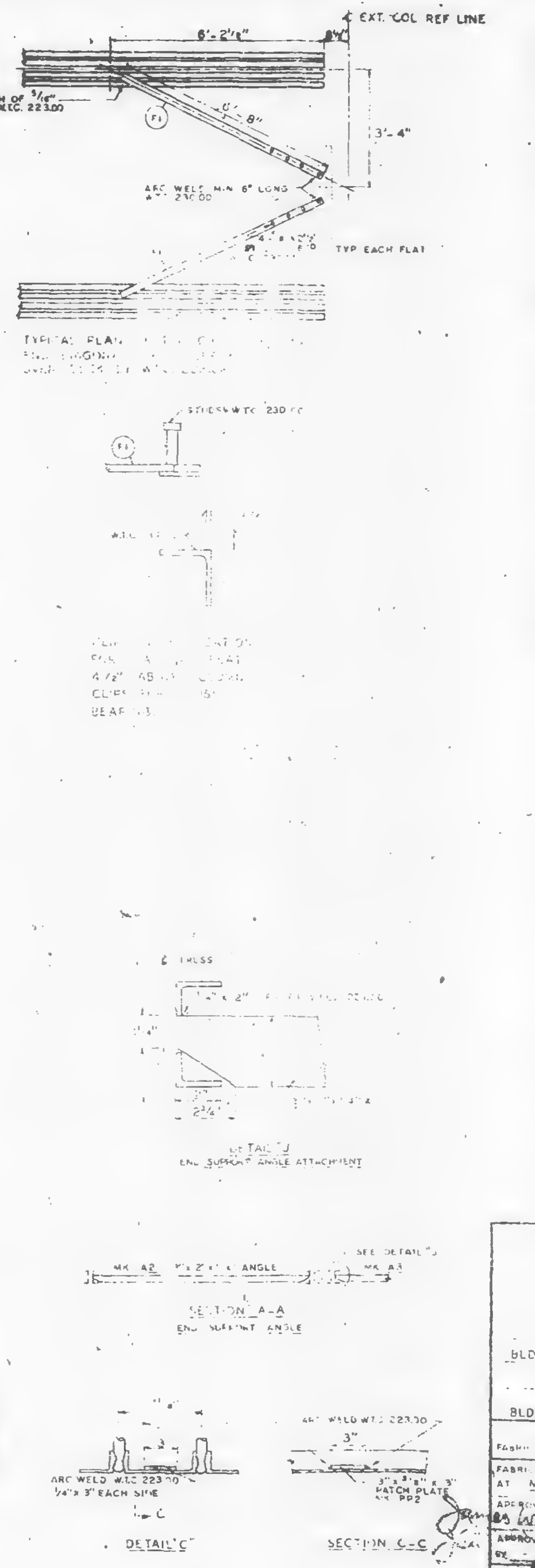
DETAIL "E"

DETAIL "F"

DETAIL "G"

COVER PLATES #29 GA. THICK

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T28N | 1 | C32T28N - 67'-9" | ST 228N |
| | T31 | 2 | C32T31 - 59'-0¾" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | ST 208C |
| | T8D | 1 | 24T8D - 19'-11" | ST 208D |
| | T8E | 1 | 24T8E - 19'-11" | ST 208E |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-1[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-1[illegible] | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x [illegible] 3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x [illegible] | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x [illegible] x [illegible] | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4⅛" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | [illegible] | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x [illegible] x [illegible] x 3'-6⅞" | ST 298 |
| | DUS-3 | | 3½" x [illegible] x [illegible] x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | [illegible] | [illegible] x 1'-3 | ST 400 |
| | CB2 | | [illegible] x 1'-3" | ST 400 |
| | CB3 | 6 | [illegible] x 1'-5" | ST 400 |
| CONNECTION PLATES | [illegible] | 5 | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | P3 | 1 | [illegible] | ST 400 |
| | P5 | 3 | [illegible] x 1'-6" | ST 400 |
| | P6 | 1 | [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | [illegible] | [illegible] REBAR x 0'-[illegible] | ST 400 |
| PATCH PLATES | PP1 | 16 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x [illegible]-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | GDC. BY |
|---|---|---|---|
| 1 | 4-24-69 | AS NOTED | |

| | |
|---|---|
| [illegible]-10 | 7-22-68 |
| [illegible] 49 | 1-6-69 |
| [illegible]-3 | 10-15-68 |
| [illegible] 15 & 6 | 7-22-68 |
| AB4 42 | 10-15-68 |
| [illegible] 124 | 1-6-69 |
| [illegible]-AB1-25 & 28 | 1-6-69 |
| [illegible]-AB1-29 & 30 | 1-6-69 |
| 7-AB2-19 | 1-6-69 |

[illegible] PANEL [illegible]

[illegible] N.Y.C.

[illegible] AUTHORITY

BLDG. A FLOORS 44 (NORTH ONLY)

PANEL E3N - 20' x 59'-0¾"

BLDG. B FLOORS 44 (WEST & EAST) 1

FABRICATION BY [illegible] COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION FOR P. N. Y. A. James White DATE 6/12/69

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

DETAILED BY: R. CARL WEBER

LACLEDE STEEL CO.

DESIGN DRAWING NO. 7 AB3 49

DRAWN BY odc DATE APRIL 2, 1969

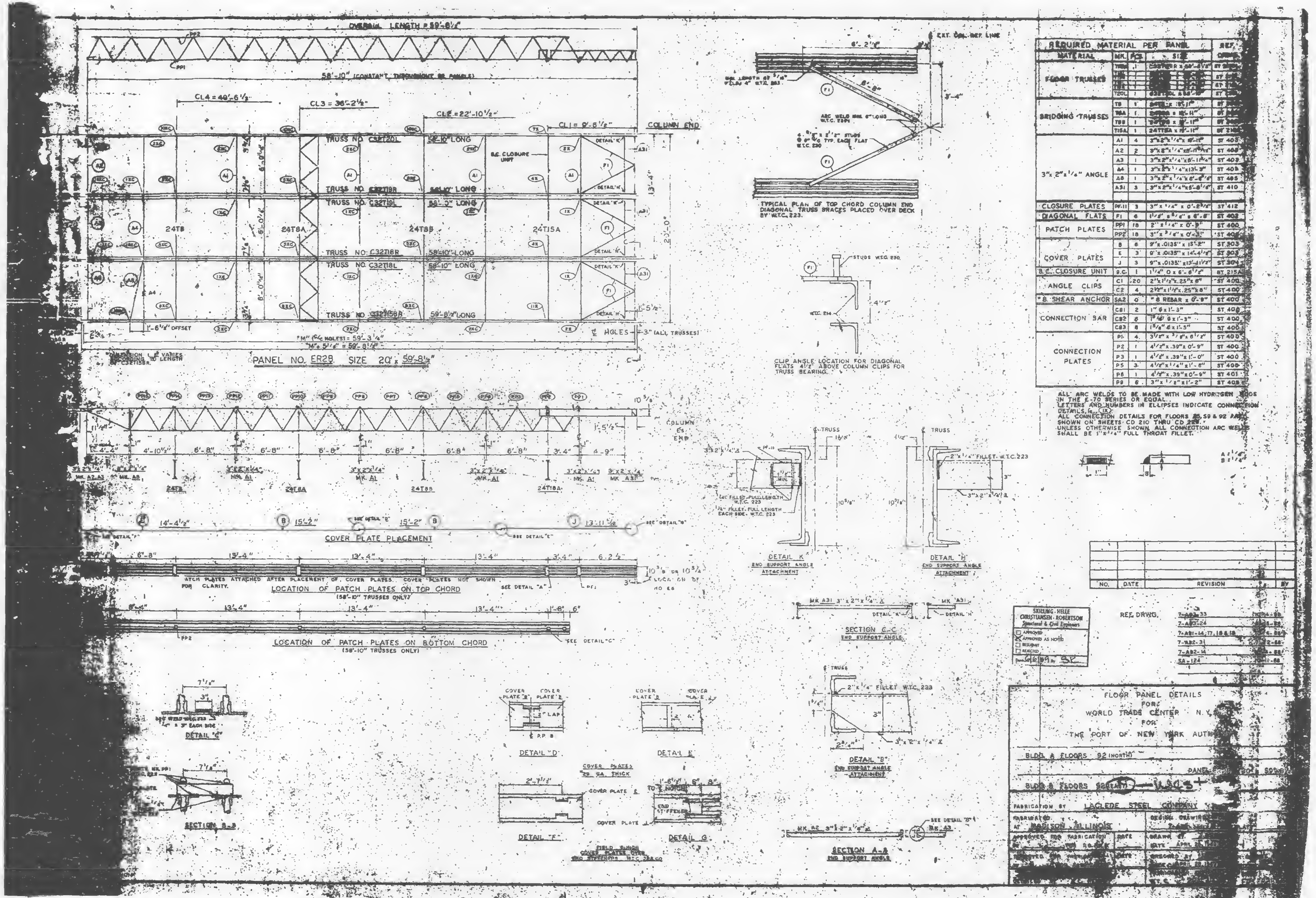
CHECKED BY T.M. CHURA DATE APRIL 2, 1969

FABRICATION CONT. NO. W.T.C. 221

PLATE

IN CHARGE OF PROD. DEPT.

SHEET NO. FP E3N


OVERALL LENGTH = 59'-8½"
PP2
PP1
58'-10" (CONSTANT THROUGHOUT 58 PANELS)
CL4 = 40'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
COLUMN END
TRUSS NO. C32T20L 58'-10" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T15BR 59'-8½" LONG
B.C. CLOSURE UNIT
24T8
24T8A
24T8B
24T15A
DETAIL "K"
DETAIL "H"
A31
F1
13'-4"
20'-0"
1'-5½"
1'-6½" OFFSET
"M" (C.L. HOLES) = 59'-3¼"
"M" + 5¼" = 59'-8½"
C.L. HOLES
3" (ALL TRUSSES)
DIMENSION "L" VARIES DEPENDING ON LENGTH OF C32T15BR.
PANEL NO. ER2B SIZE 20' x 59'-8½"
COLUMN C.L. END
4'-10½"
6'-8"
3'-4"
4'-9"
3"x2"x¼" MK. A2, A3
MK. A8
MK. A1
MK. A31
24T8
24T8A
24T8B
24T18A
14'-4½"
15'-2"
13'-11½"
SEE DETAIL "E"
SEE DETAIL "C"
SEE DETAIL "F"
COVER PLATE PLACEMENT
13'-4"
6'-2½"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)
SEE DETAIL "A"
10⅜" or 10¾" LOCATION OF 10 ES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)
SEE DETAIL "C"
EXT. COL. REF. LINE
6'-2½"
3'-4"
ARC WELD 1½" LONG W.T.C. 230
STUDS 6" O.C. TYP. EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
4½"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
C.L. TRUSS
¼" FILLET FULL LENGTH W.T.C. 223
¼" FILLET FULL LENGTH EACH SIDE W.T.C. 223
10⅜"
10¾"
2"x¼" FILLET W.T.C. 223
3"x2"x¼" L
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT
MK A31 3"x2"x¼" L
MK A31
SECTION C-C
END SUPPORT ANGLE
TRUSS
2"x¼" FILLET W.T.C. 223
3"x2"x¼" L
DETAIL "B"
END SUPPORT ANGLE ATTACHMENT
7¼"
3"
DETAIL "C"
SECTION B-B
COVER PLATE "B"
COVER PLATE "E"
2" LAP
DETAIL "D"
DETAIL "E"
COVER PLATES 29 GA. THICK
COVER PLATE
END STIFFENER
DETAIL "F"
DETAIL "G"
FIELD BURNOUT COVER PLATES OVER END STIFFENERS W.T.C. 228.00
MK A2 3"x2"x¼" L
SEE DETAIL "B"
SECTION A-A
END SUPPORT ANGLE
1"
B
A
A = ¼"
B = ¼"

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T15B | 1 | C32T15BR x 59'-8½" | ST [illegible] |
| | [illegible] | 1 | [illegible] | ST [illegible] |
| | [illegible] | 1 | [illegible] | ST [illegible] |
| | [illegible] | 1 | [illegible] | ST [illegible] |
| | T20L | 1 | C32T20L x 58'-10" | ST [illegible] |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | ST [illegible] |
| | T8A | 1 | 24T8A x 19'-11" | ST [illegible] |
| | T8B | 1 | 24T8B x 19'-11" | ST [illegible] |
| | T15A | 1 | 24T15A x 19'-11" | ST 21[illegible] |
| 3"x2"x¼" ANGLE | A1 | 4 | 3"x2"x¼"x 19'-11" | ST 405 |
| | A2 | 2 | 3"x2"x¼"x8'-11¾" | ST 405 |
| | A3 | 1 | 3"x2"x¼"x8'-11¾" | ST 405 |
| | A4 | 1 | 3"x2"x¼"x13'-3" | ST 405 |
| | A8 | 1 | 3"x2"x¼"x6'-6⅞" | ST 405 |
| | A31 | 3 | 3"x2"x¼"x5'-8¼" | ST 410 |
| CLOSURE PLATES | PF-11 | 3 | 3"x¼" x 0'-2½" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-3" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x.0135" x 15'-2" | ST 303 |
| | E | 3 | 9"x.0135" x 14'-4½" | ST 303 |
| | J | 3 | 9"x.0135" x 13'-11½" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1¼" O x 6'-6½" | ST 215A |
| ANGLE CLIPS | C1 | 20 | 2"x1½"x.25"x 6" | ST 400 |
| | C2 | 4 | 2½"x1½"x.25"x 8" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 8 | 1¼" ϕ x 1'-3" | ST 400 |
| | CB3 | 8 | 1⅝" ϕ x 1'-3" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-8" | ST 400 |
| | P8 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x ½" x 1'-2" | ST 405 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 22[illegible].
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FULL THROAT FILLET.

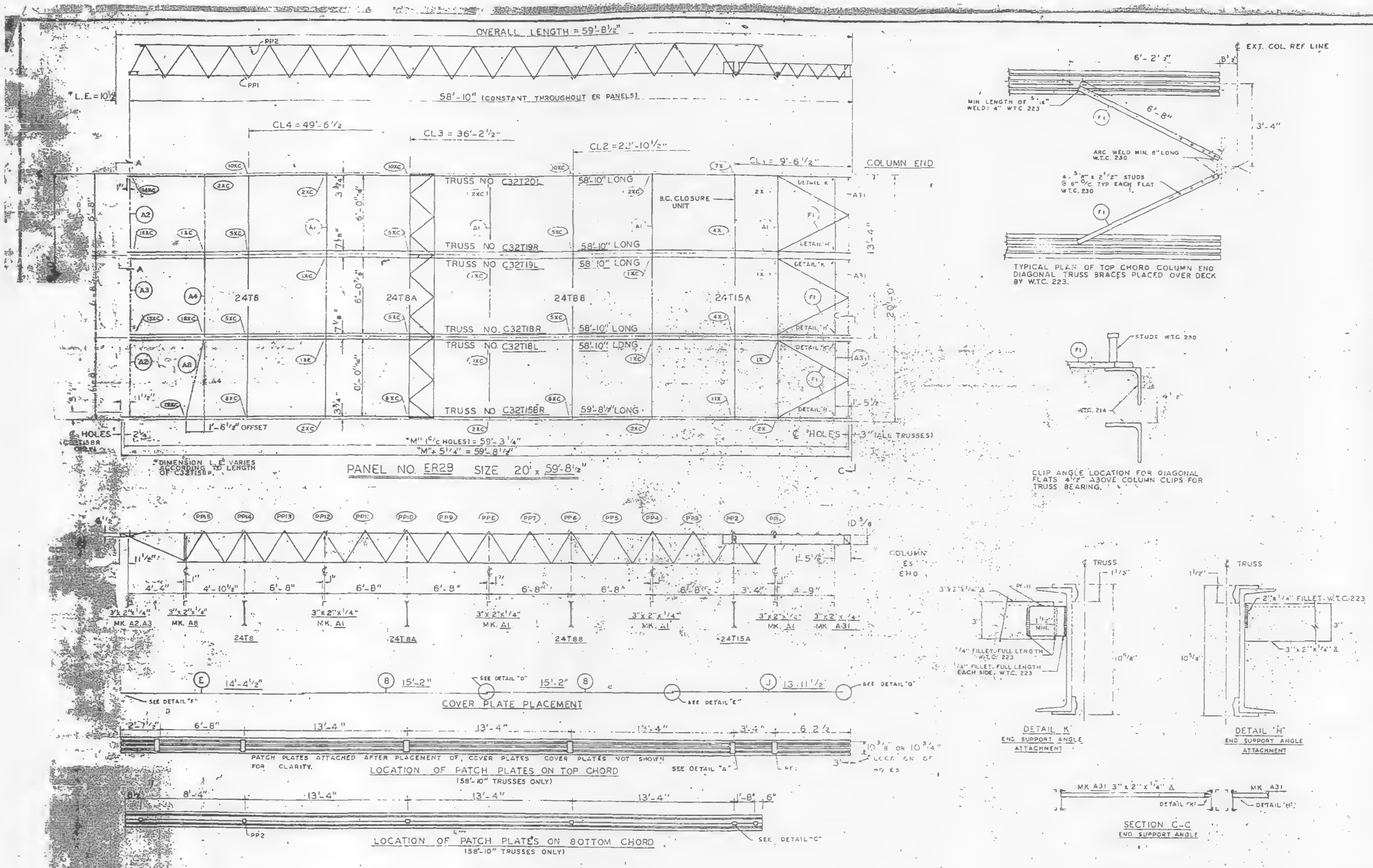
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

SKILLING · HELLE
CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 6/6/69 By SK

| REF. DRWG. | |
|---|---|
| 7-AB2-33 | 10-24-68 |
| 7-AB3-24 | [illegible] |
| 7-AB1-14, 17, 18 & 19 | [illegible] |
| 7-AB2-31 | [illegible] |
| 7-AB2-14 | [illegible] |
| SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.
FOR
THE PORT OF NEW YORK AUTH[illegible]

BLDG. A FLOORS 92 (NORTH)
PANEL [illegible] 59-8½
BLDG. B FLOORS 92 (EAST) — WAS +
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING [illegible]
APPROVED FOR FABRICATION BY [illegible] DATE
DRAWN BY [illegible]
DATE APRIL 2[illegible]
CHECKED BY [illegible]
DATE APRIL 2[illegible]


OVERALL LENGTH = 59'-8½"
PP2
PP1
L.E.=10½"
58'-10" (CONSTANT THROUGHOUT ER PANELS)
CL4 = 49'-6½
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
COLUMN END
TRUSS NO C32T20L
58'-10" LONG
B.C. CLOSURE UNIT
TRUSS NO C32T19R
TRUSS NO C32T19L
TRUSS NO C32T18R
TRUSS NO C32T18L
TRUSS NO C32T158R
59'-8½" LONG
24T8
24T8A
24T88
24T15A
DETAIL K
DETAIL H
1'-6½" OFFSET
"M" (C/C HOLES) = 59'-3¼"
"M" + 5¼" = 59'-8½"
℄ HOLES - 3" (ALL TRUSSES)
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T158R
PANEL NO. ER28 SIZE 20' x 59'-8½"
20'-0"
13'-4"
6'-8"
EXT. COL. REF. LINE
6'-2½"
6'-8"
3'-4"
MIN. LENGTH OF 5/16 WELD: 4" W.T.C. 223
ARC WELD MIN. 6" LONG W.T.C. 230
4 - ⅜" x 2½" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
COLUMN END
4'-4"
4'-10½"
6'-8"
3'-4"
4'-9"
MK. A2, A3
MK. A8
MK. A1
MK. A31
COVER PLATE PLACEMENT
14'-4½"
15'-2"
13'-11½"
SEE DETAIL "F"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
LOCATION OF PATCH PLATES ON TOP CHORD
(158'-10" TRUSSES ONLY)
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
13'-4"
6'-2½
LOCATION OF PATCH PLATES ON BOTTOM CHORD
(158'-10" TRUSSES ONLY)
SEE DETAIL "C"
℄ TRUSS
1/4" FILLET, FULL LENGTH W.T.C. 223
1/4" FILLET, FULL LENGTH EACH SIDE, W.T.C. 223
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
2"x¼" FILLET W.T.C. 223
3"x2"x¼" ∠
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT
MK A31 3"x2"x¼" ∠
SECTION C-C
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL

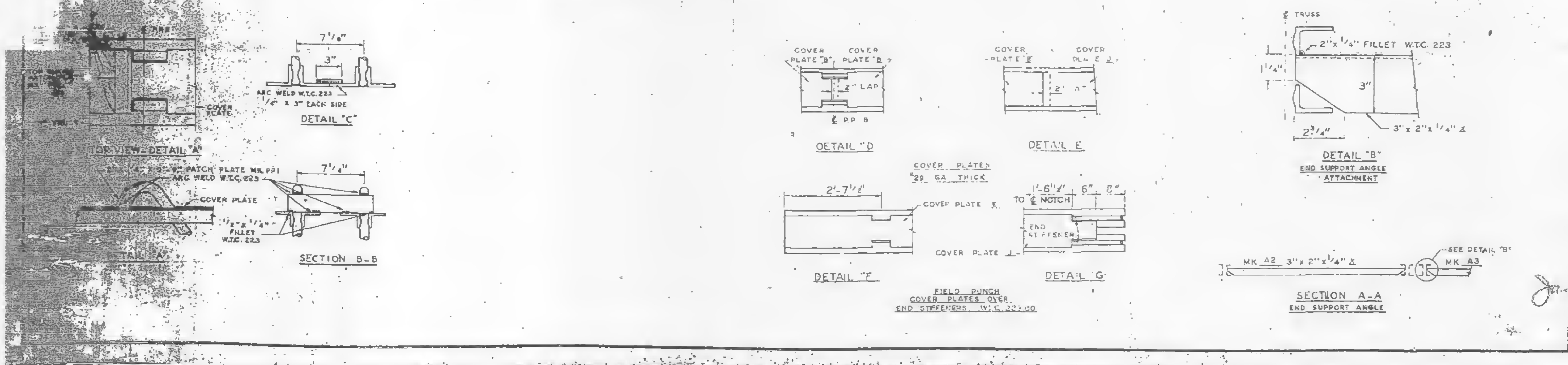
| MATERIAL | MK. | PCS. | SIZE | REF. DRWG. |
|---|---|---|---|---|
| FLOOR TRUSSES | T158R | 1 | C32T158R x 59'-8½" | ST 2158L |
| | T18L | 1 | C32T18L x 58'-10" | ST 218L |
| | T18R | 1 | C32T18R x 58'-10" | |
| | T19L | 1 | C32T19L x 58'-10" | ST 219L |
| | T19R | 1 | C32T19R x 58'-10" | |
| | T20L | 1 | C32T20L x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | 8T 208 |
| | T8A | 1 | 24T8A x 19'-11" | 8T 208A |
| | T88 | 1 | 24T88 x 19'-11" | 8T 2088 |
| | T15A | 1 | 24T15A x 19'-11" | 8T 215A |
| 3"x 2"x ¼" ANGLE | A1 | 4 | 3"x 2"x ¼"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x 2"x ¼"x 5'-1 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x ¼"x 5'-11¾" | ST 403 |
| | A4 | 1 | 3"x 2"x ¼"x 13'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x ¼"x 6'-8⅝" | ST 405 |
| | A31 | 3 | 3"x 2"x ¼"x 5'-8⅛" | ST 410 |
| | | | | |
| CLOSURE PLATES | PF-11 | 3 | 3" x ¼" x 0'-2⅜" | ST 4·2 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |
| COVER PLATES | 8 | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| | J | 3 | 9" x .0135" x 13'-11½" | ST 304 |
| 8.C. CLOSURE UNIT | B.C. | 1 | 1¼" ◻ x 6'-6½" | 8T 215A |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x .25" x 6" | ST 400 |
| | C2 | 4 | 2½" x 1½" x .25" x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | C81 | 2 | 1" ø x 1'-3" | ST 400 |
| | C82 | 6 | 1³⁄₈" ø x 1'-3" | ST 400 |
| | C83 | 6 | 1⅝" ø x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x ½" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x ¼" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| ⚠1 | 6-13-69 | AS NOTED | G.D.C. |

REF. DRWG.

| | |
|---|---|
| 7-A83-33 | 10-4-88 |
| 7-A83-24 | 8-15-68 |
| 7-A81-14, 17, 18 & 19 | 10-4-68 |
| 7-A82-3 | 7-22-68 |
| 7-A82-14 | 10-4-88 |
| 5A-124 | 10-11-68 |

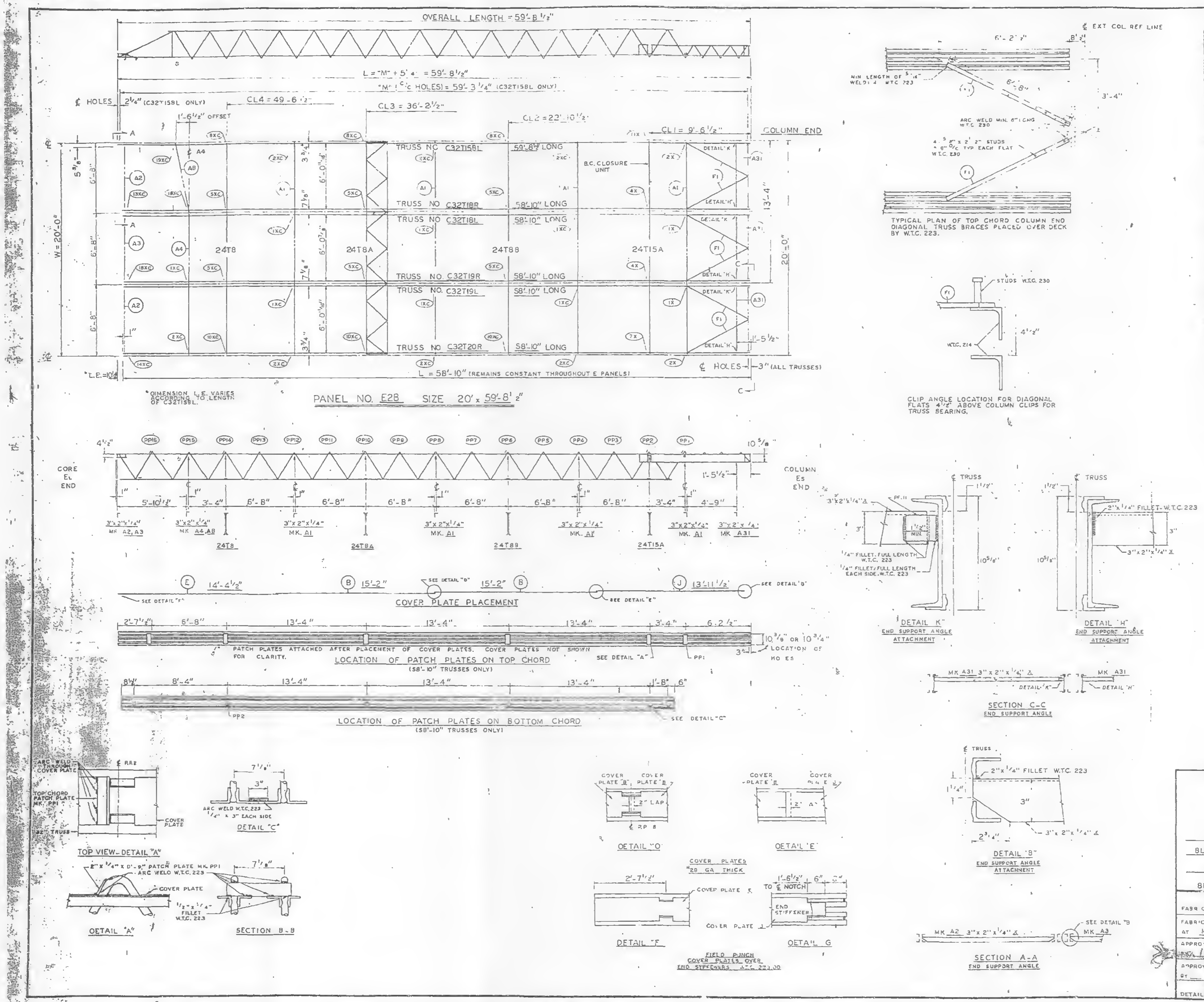


FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)
PANEL ER28 - 20' x 59'-8½"
BLDG. 8 FLOORS 92 (WEST) ⚠1

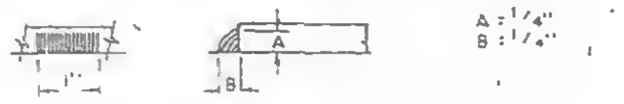
FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-A83-33 | PLATE |
| APPROVED FOR FABRICATION FOR P O N Y A | DATE 7/28/69 | DRAWN BY<br>DATE APRIL 28, 1969 | |
| APPROVED FOR FABRICATION BY ... FOR FABRICATOR<br>LACLEDE STEEL CO. | DATE | CHECKED BY T.M. CHURA<br>DATE APRIL 28, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A C WEBER | | FABRICATION CONT NO W.T.C. 221 | SHEET NO FP ER28 |


OVERALL LENGTH = 59'-8 1/2"
L = "M" + 5 1/4" = 59'-8 1/2"
"M" ℄-℄ HOLES = 59'-3 1/4" (C32T158L ONLY)
℄ HOLES 2 1/4" (C32T158L ONLY)
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
1'-6 1/2" OFFSET
TRUSS NO. C32T158L 59'-8 1/2" LONG
TRUSS NO. C32T18R 58'-10" LONG
TRUSS NO. C32T18L 58'-10" LONG
TRUSS NO. C32T19R 58'-10" LONG
TRUSS NO. C32T19L 58'-10" LONG
TRUSS NO. C32T20R 58'-10" LONG
B.C. CLOSURE UNIT
24T8
24T8A
24T8B
24T15A
W = 20'-0"
20'-0"
13'-4"
DETAIL "K"
DETAIL "H"
℄ HOLES 3" (ALL TRUSSES)
L = 58'-10" (REMAINS CONSTANT THROUGHOUT E PANELS)
"L.E." = 10 1/4"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T158L.
PANEL NO. E2B SIZE 20' x 59'-8 1/2"
CORE END
COLUMN END
24T8
24T8A
24T8B
24T15A
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "B"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)
SEE DETAIL "C"
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION B-B
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
COVER PLATES 28 GA. THICK
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
℄ EXT. COL. REF. LINE
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT
SECTION C-C
END SUPPORT ANGLE
DETAIL "B"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T158L | 1 | C32T158L x 59'-8 1/2" | ST 215BL |
| | T18L<br>T18R | 1<br>1 | C32T18L x 58'-10"<br>C32T18R x 58'-10" | ST 218L |
| | T19L<br>T19R | 1<br>1 | C32T19L x 58'-10"<br>C32T19R x 58'-10" | ST 219L |
| | T20R | 1 | C32T20R x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | BT 208 |
| | T8A | 1 | 24T8A x 19'-11" | BT 208A |
| | T8B | 1 | 24T8B x 19'-11" | BT 208B |
| | T15A | 1 | 24T15A x 19'-11" | BT 215A |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x 2"x 1/4"x 9'-" | ST 403 |
| | A2 | 2 | 3"x 2"x 1/4"x 5'-1 9/16" | ST 403 |
| | A3 | 1 | 3"x 2"x 1/4"x 5'-1 3/4" | ST 403 |
| | A4 | 1 | 3"x 2"x 1/4"x 3'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x 1/4"x 2'-8 5/8" | ST 405 |
| | A31 | 3 | 3"x 2"x 1/4"x 5'-8 1/8" | ST 410 |
| | | | | |
| CLOSURE PLATES | PF11 | 3 | 3"x 1/4" x 0-2 3/8 | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135"x 14'-4 1/2" | ST 303 |
| | J | 3 | 9"x .0135"x 13'-11 1/2" | ST 304 |
| B.C. CLOSURE UNIT | B.C. | 1 | 1 1/4" ⌀ x 6'-6 1/2" | BT 215A |
| ANGLE CLIPS | C1 | 20 | 2"x 1 1/2"x .25"x 6" | ST 400 |
| | C2 | 4 | 2 1/2"x 1 1/2"x .25"x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" ⌀ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2"x 3/8"x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2"x .39"x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2"x 1/4"x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2"x .39"x 0'-9" | ST 401 |
| | P9 | 6 | 3"x 1/2"x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

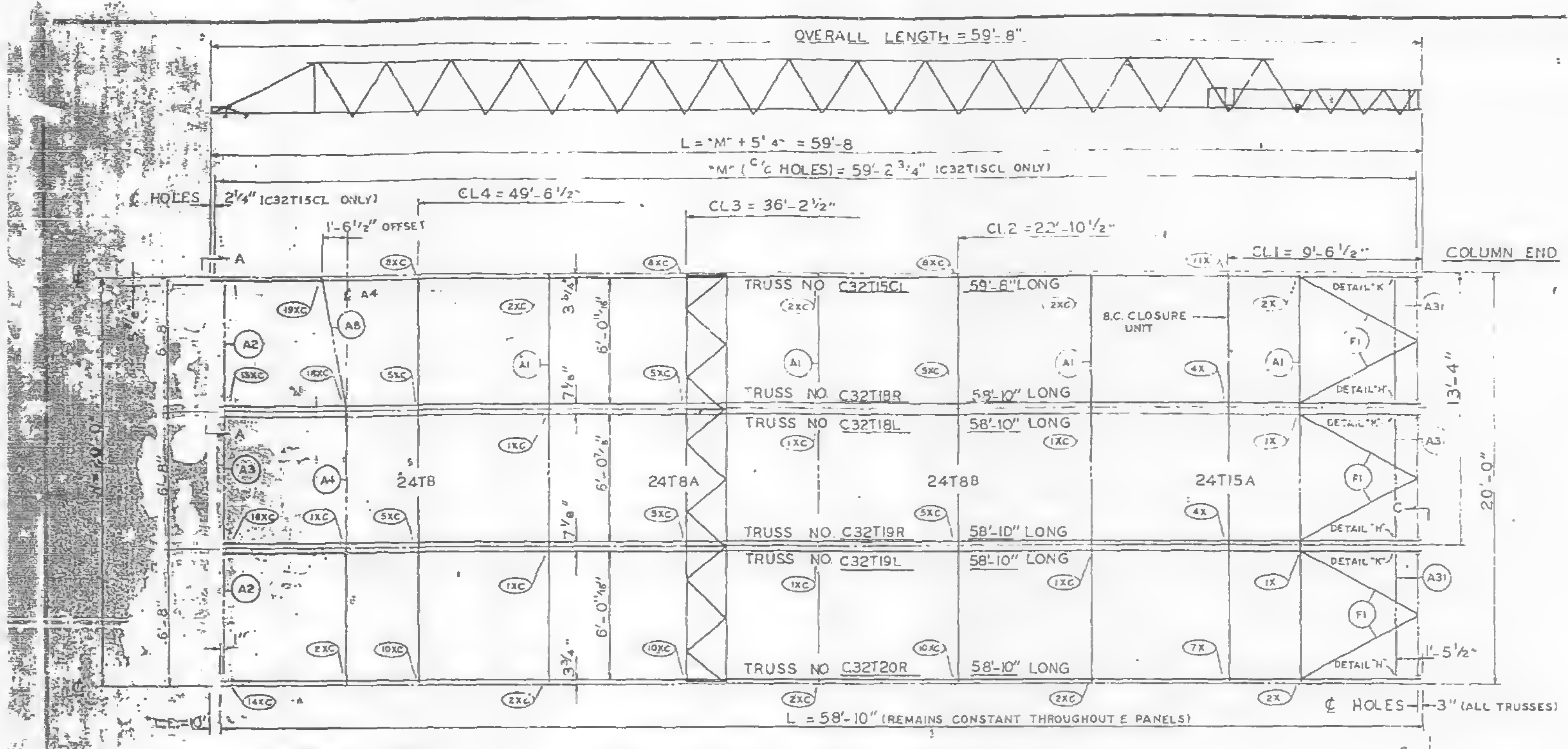
REF. DRWG.

| | |
|---|---|
| 7-AB3-32 | 10-4-68 |
| 7-AB3-24 | 8-15-68 |
| 7-AB1-14, 17, 18 & 19 | 10-4-68 |
| 7-AB2-3 | 7-22-68 |
| 7-AB2-14 | 10-4-68 |
| SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

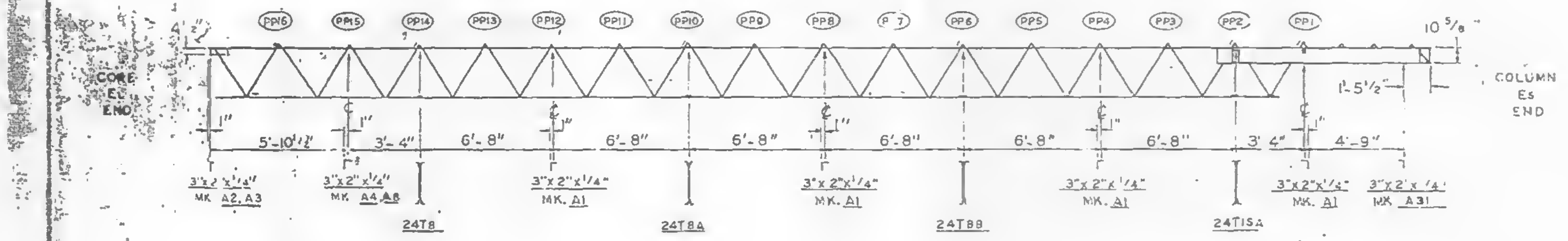
BLDG. A FLOORS 92 (NORTH)
PANEL E2B - 20' x 59'-8 1/2"
BLDG. B FLOORS 92 (WEST)

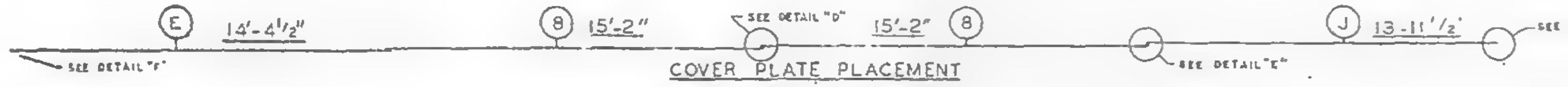
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-32 PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 6/6/69
DRAWN BY
DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.N. CHURA
DATE APRIL 26, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP E2B



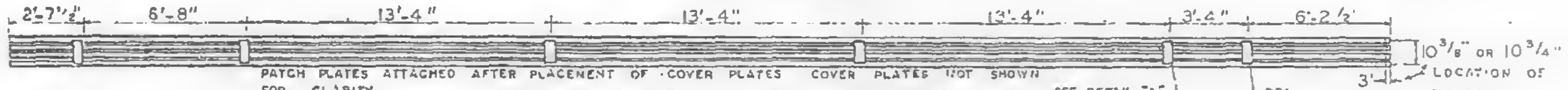
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T15CL.

PANEL NO. E2C SIZE 20' x 59'-8"



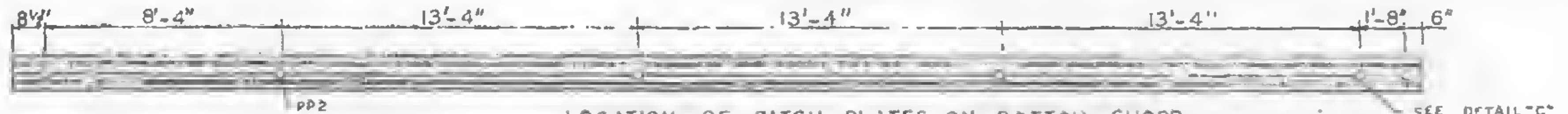


COVER PLATE PLACEMENT

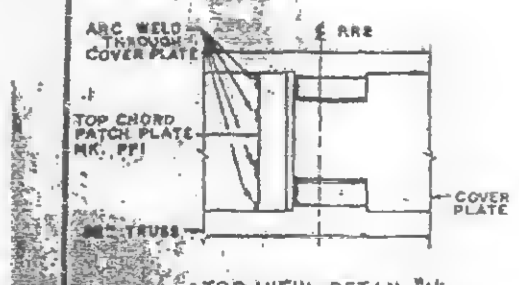


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY.

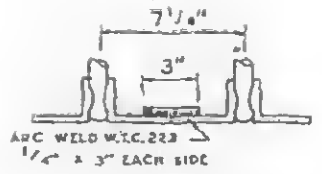
LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)



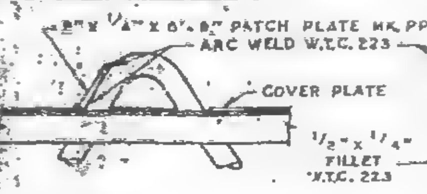
LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)



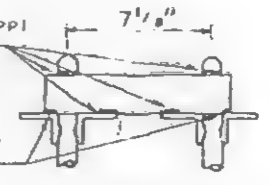
TOP VIEW - DETAIL "A"



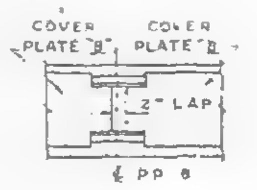
DETAIL "C"



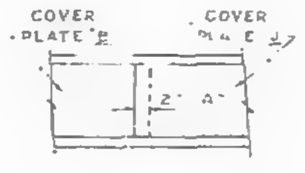
DETAIL "A"



SECTION B-B

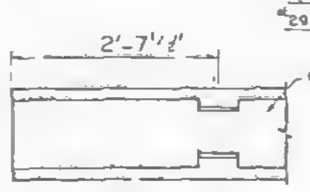


DETAIL "D"

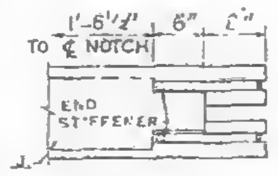


DETAIL "E"

COVER PLATES
29 GA THICK

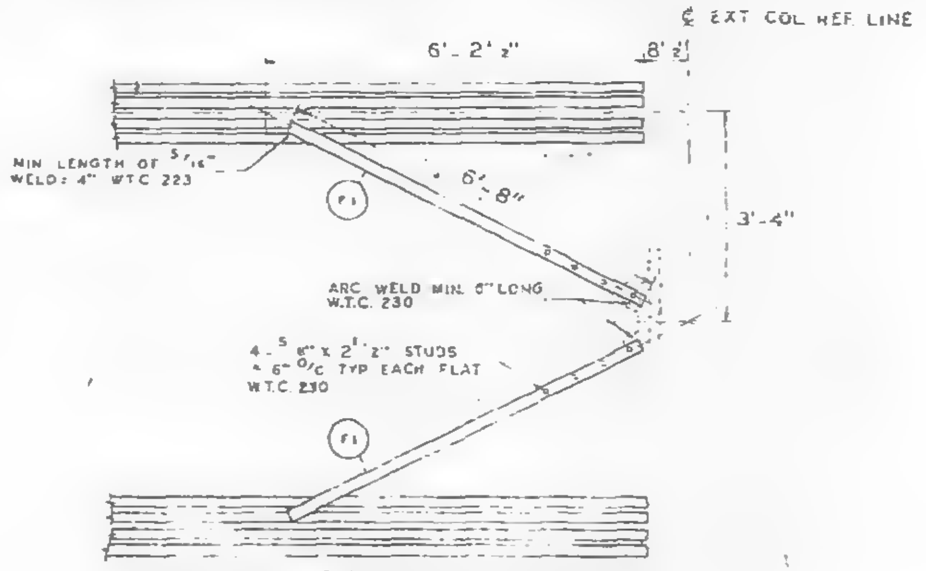


DETAIL "F"

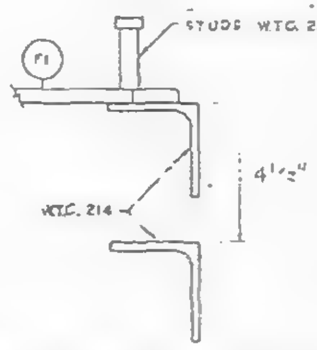


DETAIL "G"

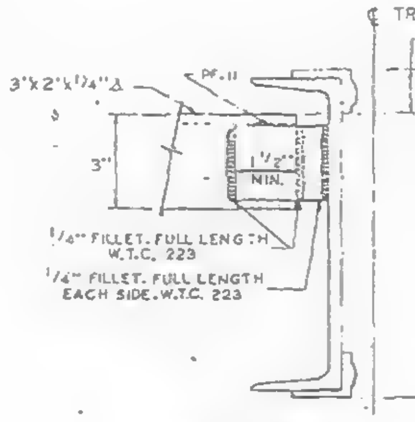
FIELD PUNCH
COVER PLATES OVER
END STIFFENERS W.T.C. 223.CO


℄ EXT COL REF LINE
6'-2 1/2"
8 1/2"
3'-4"
6'-8"
MIN LENGTH OF 5/16" WELD: 4" WTC 223
ARC WELD MIN 6" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230
F1

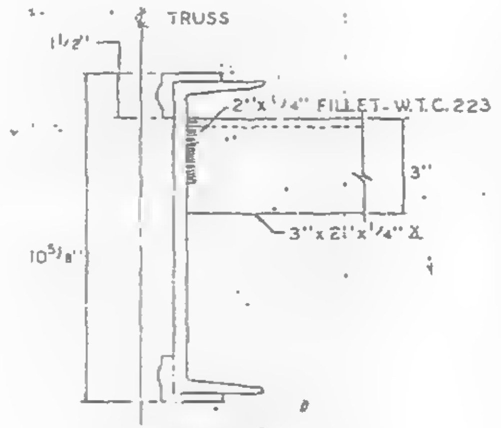
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



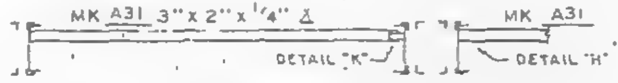
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.


℄ TRUSS
1 1/2"
3"x2"x1/4" ∠
PF.11
3"
1 1/2" MIN.
1/4" FILLET, FULL LENGTH W.T.C. 223
1/4" FILLET, FULL LENGTH EACH SIDE, W.T.C. 223
10 5/8"

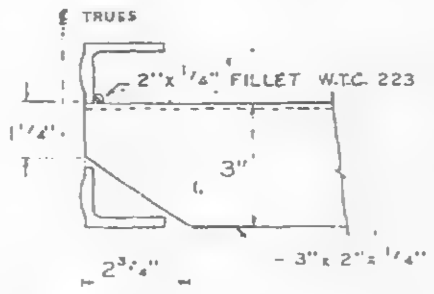
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



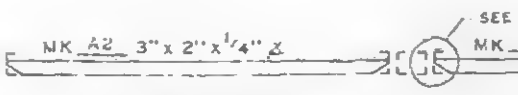
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



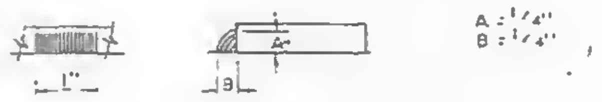
DETAIL "B"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | ORWG. |
| FLOOR TRUSSES | T15CL | 1 | C32T15CL x 59'-8" | ST 215CL |
| | T18L | 1 | C32T18L x 58'-10" | ST 218L |
| | T18R | 1 | C32T18R x 58'-10" | |
| | T19L | 1 | C32T19L x 58'-10" | ST 219L |
| | T19R | 1 | C32T19R x 58'-10" | |
| | T20R | 1 | C32T20R x 58'-10" | ST 220L |
| BRIDGING TRUSSES | T8 | 1 | 24T8 x 19'-11" | 8T 208 |
| | T8A | 1 | 24T8A x 19'-11" | 8T 208A |
| | T88 | 1 | 24T88 x 19'-11" | 8T 2088 |
| | T15A | 1 | 24T15A x 19'-11" | 8T 215A |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x2"x1/4"x 19'-11" | ST 403 |
| | A2 | 2 | 3"x2"x1/4 x5'-9 1/16" | ST 403 |
| | A3 | | 3"x2"x1/4 x5'-11 3/4" | ST 403 |
| | A4 | 1 | 3"x2"x1/4 x13'-3" | ST 403 |
| | A8 | 1 | 3"x2"x1/4 x6'-8 5/8" | ST 405 |
| | A31 | 3 | 3"x2"x1/4"x5'-8 1/8" | ST 410 |
| | | | | |
| CLOSURE PLATES | PF.11 | 3 | 3"x1/4 x 0'-2 3/8" | ST 412 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | ST 402 |
| PATCH PLATES | PP1 | 18 | 2"x1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |
| COVER PLATES | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135" x 14'-4 1/2" | ST 303 |
| | J | 3 | 9"x .0135" x13'-11 1/2" | ST 304 |
| B C. CLOSURE UNIT | B.C. | 1 | 1 1/4" ⌀ x 6'-6 1/2" | 8T 215A |
| ANGLE CLIPS | C1 | 20 | 2"x1 1/2"x.25"x 6" | ST 400 |
| | C2 | 4 | 2 1/2"x1 1/2"x.25"x 6" | ST 400 |
| #8 SHEAR ANCHOR | SA2 | 0 | #8 REBAR x 0'-9" | ST 400 |
| CONNECTION BAR | CB1 | 2 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" ⌀ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 4 | 3 1/2" x 3/8" x 6 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| | P9 | 6 | 3" x 1/2" x 1'-2" | ST 409 |

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.



A = 1/4"
B = 1/4"

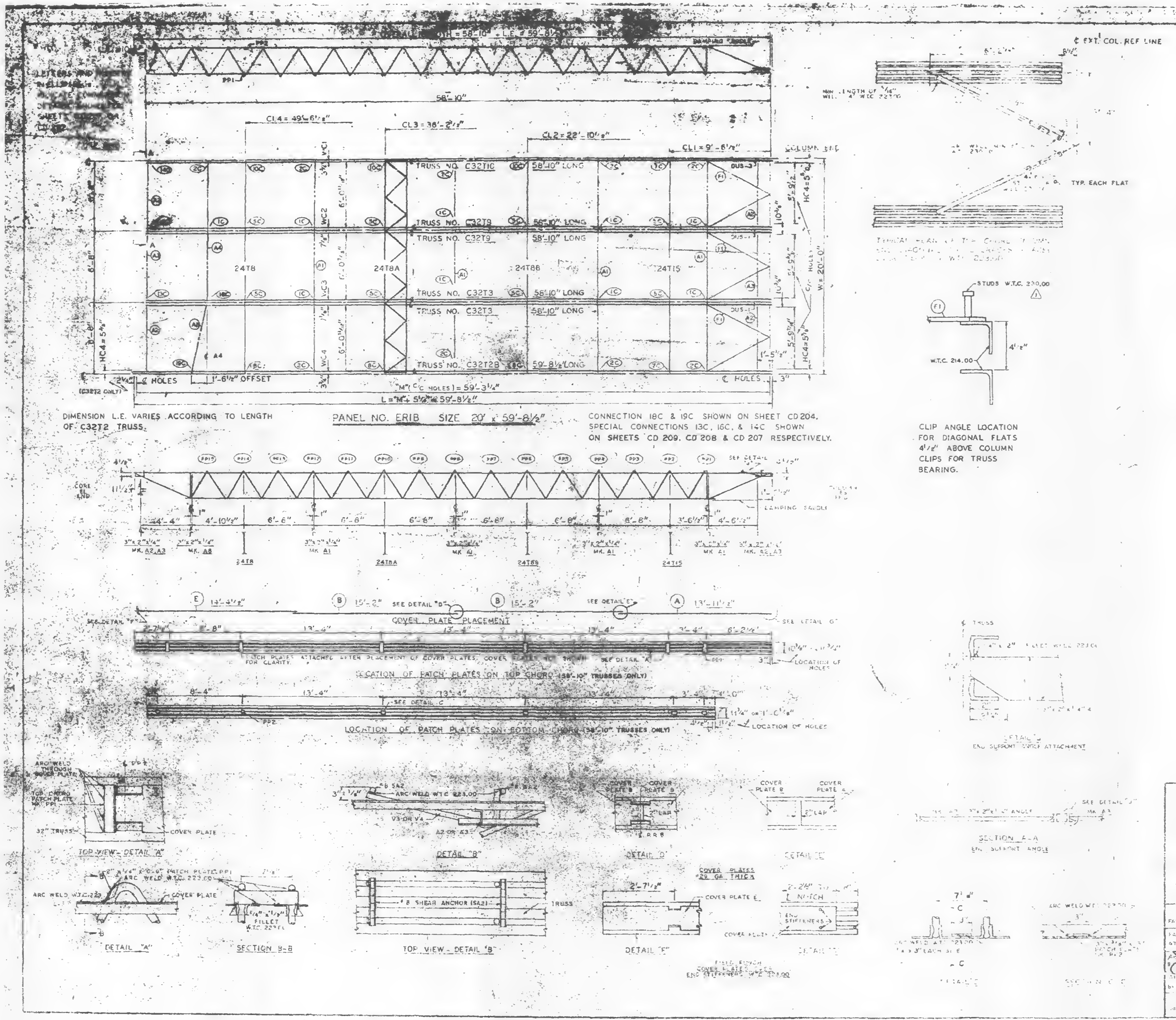
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

| REF DRWG. | | |
|---|---|---|
| | 7-A83-32 | 10-4-68 |
| | 7-A93-24 | 8-15-68 |
| | 7-A81-14, 17, 18 & 19 | 10-4-68 |
| | 7-A82-3 | 7-22-68 |
| | 7-A82-14 | 10-4-68 |
| | SA-124 | 10-11-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)
PANEL E2C - 20' x 59'-8"
BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATE AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-32
PLATE
APPROVED FOR FABRICATION BY FOR PONYA DATE 6/6/69
DRAWN BY LWR
DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
LACLEDE STEEL CO.
CHECKED BY T.M. CHURA
DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT NO WTC 221
SHEET NO FP E2C



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIB SIZE 20' x 59'-8½"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | [illegible] |
|---|---|---|---|---|
| MATERIAL | MK | [illegible] | SIZE | [illegible] |
| [illegible] TRUSSES | T2B | | C32T2B 59'-8½" | [illegible] |
| | T3 | [illegible] | C32T3 - 58'-10" | 203 |
| | T9 | 2 | C32T9 - 58'-10" | 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | | 24T8 [illegible] | 208 |
| | T8A | | 24T8A [illegible] | 208A |
| | T8B | | 24T8B [illegible] | 208B |
| | T15 | | 24T15 [illegible] | ST 215 |
| 3"x 2"x¼" ANGLE | [illegible] | 4 | [illegible] | ST [illegible] |
| | A2 | 4 | [illegible] | ST [illegible] |
| | A3 | 2 | [illegible] | [illegible] |
| | A4 | 1 | 3"x2"x¼"x43'-3 | ST 403 |
| | A8 | 1 | 3"x2"x¼"x 6'-8⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½"x⅝"x 6'-8" | ST 402 |
| [illegible] | A | 3 | [illegible] | [illegible] |
| | B | 5 | 9"x.0035"x [illegible] | [illegible] |
| | E | [illegible] | [illegible] | [illegible] |
| ANGLE CLIPS | C1 | 20 | 2"x1½"x¼"x 0'-6" | [illegible] |
| | C2 | 4 | 2½"x1½"x¼"x 6" | [illegible] |
| [illegible] | DUS-2 | 2 | [illegible] | [illegible] |
| | DUS-3 | | [illegible] | [illegible] |
| CONNECTION BAR | CB1 | 1 | [illegible] | [illegible] |
| | CB2 | 3 | ¾" ⌀ x 1'-3" | [illegible] |
| | CB3 | 6 | ½" ⌀ x 1'-5" | [illegible] |
| CONNECTION PLATES | P1 | 5 | 3½"x⅜"x 8½" | [illegible] |
| | P2 | 1 | 4"x2"x.39"x0'-9" | [illegible] |
| | P3 | 1 | 4"x2"x.39"x1'-0" | [illegible] |
| | P5 | 3 | 4"x2"x¼"x1'-6" | ST 400 |
| | P6 | 1 | 4"x2"x.39"x0'-9" | ST 401 |
| ⅜ SHEAR ANCHOR | SA2 | 6 | [illegible] | ST 400 |
| PATCH PLATES | PP1 | 16 | [illegible] | [illegible] |
| | PP2 | 10 | [illegible] | [illegible] |

(1) ALL ARC WELD TO BE MADE WITH [illegible] RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL [illegible] WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| ⚠1 | 6-19-69 | AS NOTED | [illegible] |
|---|---|---|---|
| NO. | DATE | REVISION | |

BLDG. A FLOORS 84-91, 93-106 (N)

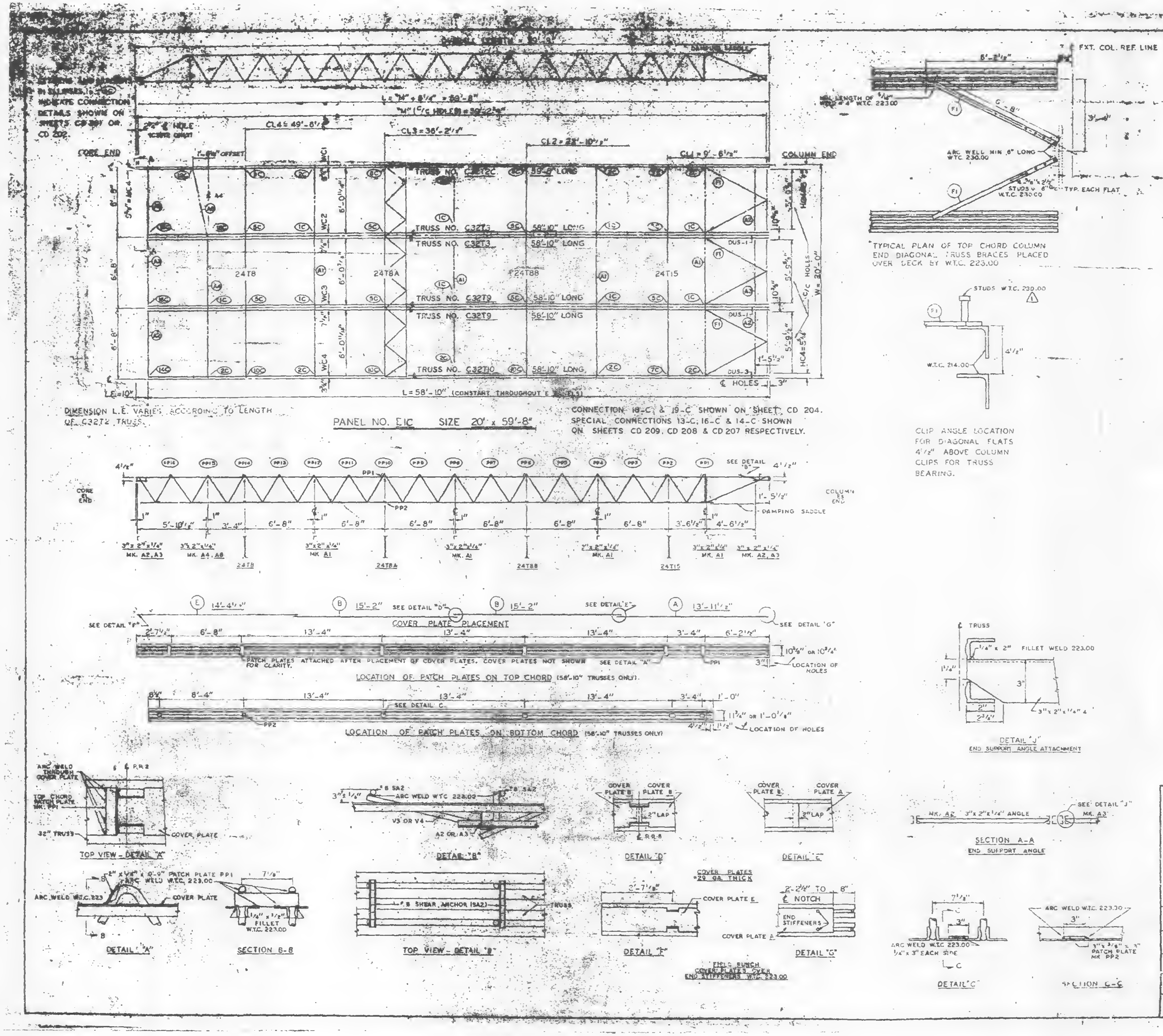
PANEL ERIB 9 8½"

BLDG. B FLOORS 84-91, 93-105 (WEST) ⚠

James White 1/2/70

LACLEDE STEEL CO.

ERIB



PANEL NO. E1C SIZE 20' x 59'-8"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

CONNECTION 19-C, & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

TOP VIEW - DETAIL "A"

DETAIL "B"

DETAIL "D"

DETAIL "E"

SECTION A-A
END SUPPORT ANGLE

DETAIL "A"

SECTION B-B

COVER PLATES #29 GA. THICK

TOP VIEW - DETAIL "B"

DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "C"

SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T3 | 2 | C32T3 - 58'-10" | ST 203 |
| | T9 | 2 | C32T9 - 58'-10" | ST 209 |
| | T10 | 1 | C32T10 - 58'-10" | ST 210 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | ST 208 |
| | T8A | 1 | 24T8A - 19'-11" | ST 208A |
| | T8B | 1 | 24T8B - 19'-11" | ST 208B |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 [illegible]" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 [illegible]" | ST 403 |
| | A4 | 1 | 3" x 2" x 1/4" x 1'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-6 5/8" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 8'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 3" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| | | | | |
| ANGLE CLIP | C1 | 20 | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 401 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x [illegible] | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 2'-[illegible] | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 1/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 [illegible]" ϕ x 1'-3" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x [illegible] | ST 4[illegible] |
| | P2 | 1 | 4 1/2" x .24" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x .30" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-8" | ST 400 |
| | P6 | 1 | 4 1/2" x [illegible]" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible]" | ST 400 |
| PATCH PLATES | PP1 | 16 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO | DATE | REVISION | |
|---|---|---|---|
| ⚠1 | 6-18-69 | AS NOTED | GCC |

⚠1 REF. DRWGS.

| | |
|---|---|
| 7-AB2-[illegible] | 7-[illegible] |
| 7-AB3-11 | 10-[illegible]-68 |
| 7-AB4-31 | 1-3-69 |
| 7-AB4-15 & 16, 30 | [illegible] |
| 7-AB4-42 & 3 | 10-15-68 |
| SK-124 | [illegible]-6-69 |
| 7-AB1-3 | 7-22-69 |
| 7-AB1-6, 7 & 8 | 7-[illegible] |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91, 93-10[illegible] (S)
PANEL E1C - [illegible] 59'-8"

BLDG. B FLOORS 50-58, 60-74, 79-91, 93-106 (EAST) [illegible]

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY James [illegible] DATE 1/2/70

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE

DETAILED BY LACLEDE STEEL [illegible]

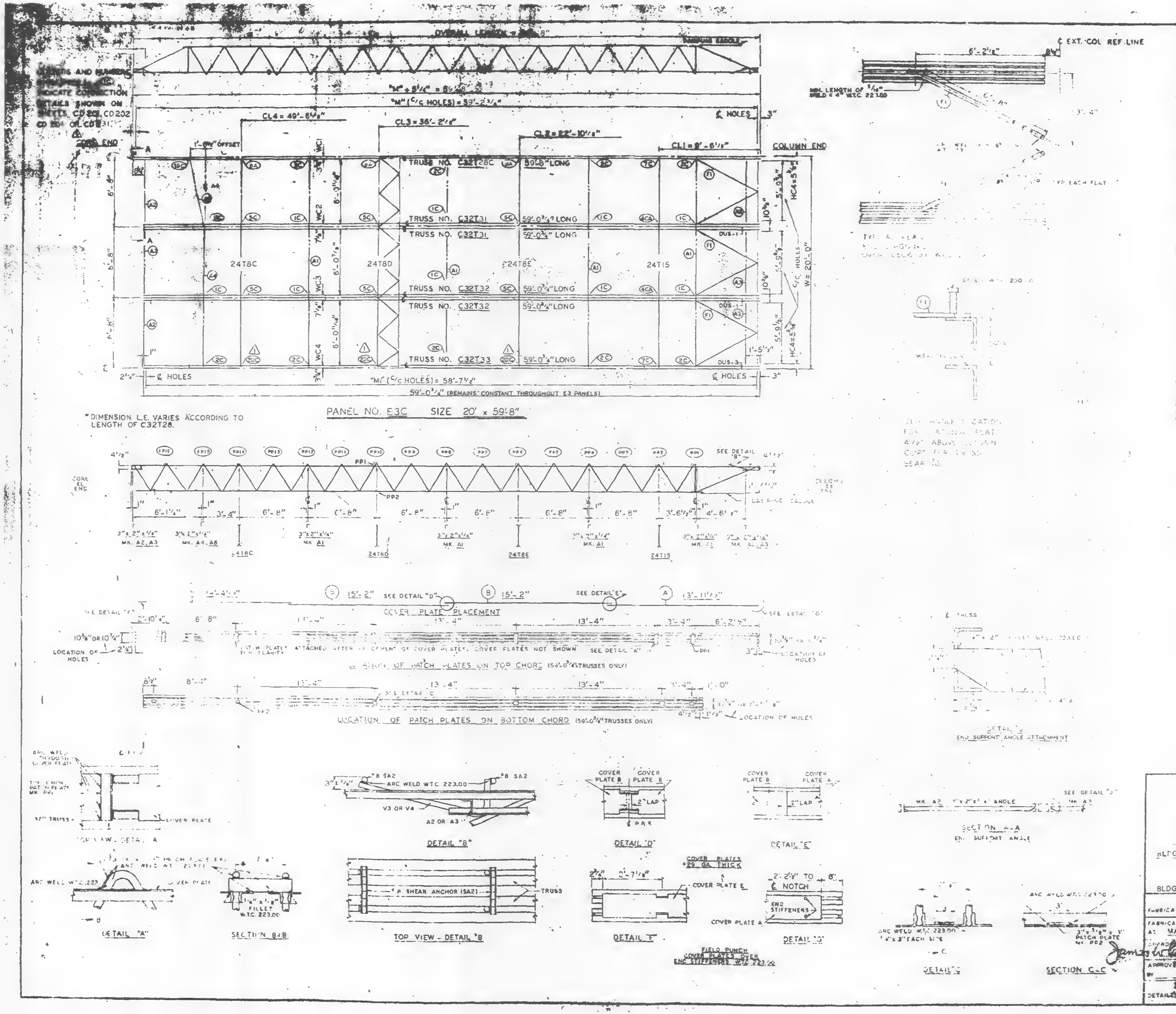
DESIGN DRAWING NO. 7-AB3-11

DRAWN BY [illegible] DATE NOV. 1, 1968

CHECKED BY T.M. CHURA DATE NOV. 4, 1968

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FP E1C



PANEL NO. E3C SIZE 20' x 59'-8"

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T28C | 1 | C32T28C - 59'-8" | ST 228C |
| | T31 | 2 | C32T31 - 59'-0¾" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | ST 208C |
| | T8D | 1 | 24T8D - 19'-11" | ST 208D |
| | T8E | 1 | 24T8E - 19'-11" | ST 208E |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅛" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅛" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x 19'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x 6'-5⅝" | ST 405 |
| DIAGONAL FLATS | F | 6 | [illegible] x ⅝" x 7'-9" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-3" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| BEARING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅜" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅜" | ST 298 |
| CONNECTION BAR | CB | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 6 | ¾" ⌀ x 1'-3" | ST 400 |
| ⚠1 CONNECTION PLATES | P15 | 6 | 6½" x ½" x 2'-9" | ST 416 |
| | [illegible] | 5 | 3½" x ⅞" x [illegible] | ST 400 |
| | P2 | 1 | 4½" x [illegible] x [illegible] | ST 400 |
| | P3 | 1 | 4½" x [illegible] x [illegible] | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | PC | 1 | 4½" x [illegible] x [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 410 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠1 | 8-4-69 | AS NOTED | G.O.C. |

| | |
|---|---|
| 7-ABD-10 | 7-22-68 |
| 7-AB3-49 | 1-6-69 |
| [illegible] | 10-15-68 |
| [illegible] | 7-22-68 |
| 7-AB4-4 | 10-15-68 |
| [illegible] 124 | 1-6-69 |
| 7-AB1-25 & 28 | 1-6-69 |
| 7-AB1-29 & 30 | 1-6-69 |
| 7-AB2-19 | 1-6-69 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER, N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

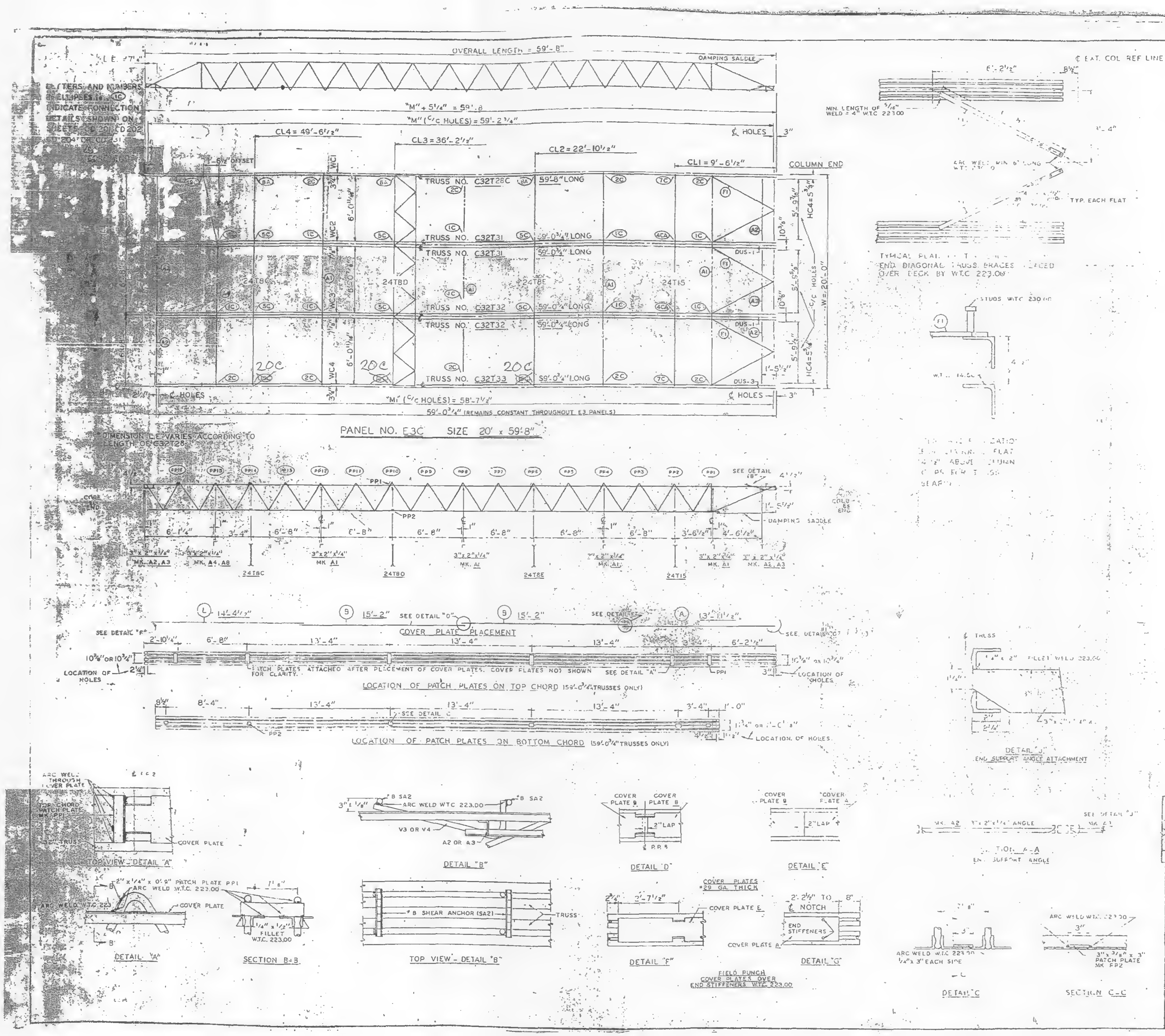
BLDG. A FLOORS 78 (SOUTH)

PANEL E3C - 20' x 59'-8"

BLDG. B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-49 | PLATE |
| APPROVED FOR FABRICATION James W. [illegible] FOR P.O.N.Y.A. | DATE 8/11/69 | DRAWN BY gdc<br>DATE APRIL 2 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY: I.M. CHURA<br>DATE APRIL 2, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E3C |

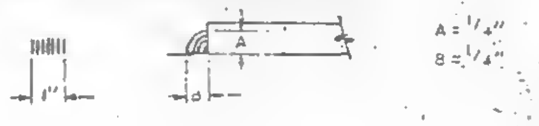

LETTERS AND NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS
OVERALL LENGTH = 59'-8"
DAMPING SADDLE
"M" + 5¼" = 59'-8
"M" (C/C HOLES) = 59'-2¾"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
℄ HOLES
COLUMN END
6½" OFFSET
TRUSS NO. C32T28C 59'-8" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T33 59'-0¾" LONG
24T8C
24T8D
24T8E
24T15
WC1
WC2
WC3
WC4
HC4 = 5'-3¾"
C/C HOLES
W = 20'-0"
DUS-1
DUS-3
20C
"M" (C/C HOLES) = 58'-7½"
59'-0¾" (REMAINS CONSTANT THROUGHOUT E3 PANELS)
PANEL NO. E3C SIZE 20' x 59'-8"
DIMENSION "L" VARIES ACCORDING TO LENGTH OF C32T28
PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13 PP14 PP15 PP16
SEE DETAIL "B"
DAMPING SADDLE
6'-1¼"
3'-4"
6'-8"
3'-6½"
4'-6½"
3" x 2" x ¼" MK. A2, A3
3" x 2" x ¼" MK. A4, A8
3" x 2" x ¼" MK. A1
14'-4½"
15'-2"
13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
COVER PLATE PLACEMENT
2'-10¼"
13'-4"
6'-2½"
10⅝" OR 10¾"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)
8¾"
8'-4"
3'-4"
1'-0"
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)
℄ EXT. COL REF LINE
6'-2½"
MIN. LENGTH OF 3/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG
TYP. EACH FLAT
TYPICAL PLAN OF THE END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
TRUSS
¼" x 2" FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3" x 2" x ¼" ANGLE
SEE DETAIL "J"
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE
TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
2" x ¼" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
DETAIL "A"
¼" x 1½" FILLET W.T.C. 223.00
SECTION B-B
#8 SA2
ARC WELD WTC 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
#8 SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE A
DETAIL "E"
COVER PLATES #29 GA. THICK
COVER PLATE E
3'-7½"
DETAIL "F"
2'-2¼" TO 8"
NOTCH
END STIFFENERS
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
DETAIL "C"
3" x 3/8" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T28C | 1 | C32T28C - 59'-8" | ST 228C |
| | T31 | 2 | C32T31 - 59'-0¾" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | 8T 208C |
| | T8D | 1 | 24T8D - 19'-11" | 8T 208D |
| | T8E | 1 | 24T8E - 19'-11" | 8T 208E |
| | T15 | 1 | 24T15 - 19'-11" | 8T 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11 9/16" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x 6'-5⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 0'-9" | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ɸ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 1/16" ɸ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ɸ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | [illegible] | ST 400 |
| | P2 | 1 | 4½" x [illegible] x 0'-8" | ST 400 |
| | P3 | 1 | 4½" x [illegible] x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | [illegible] | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

6½" x ½" x 2'-9"

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

| | |
|---|---|
| 7-AB2-10 | 7-22-68 |
| 7-AB3-49 | 1-6-69 |
| 7-AB4-[illegible] | 10-15-68 |
| 7-AB4-5 & 6 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 1-8-69 |
| 7-AB1-25 & 28 | 1-6-69 |
| 7-AB1-29 & 30 | 1-6-69 |
| 7-AB2-19 | 1-6-69 |

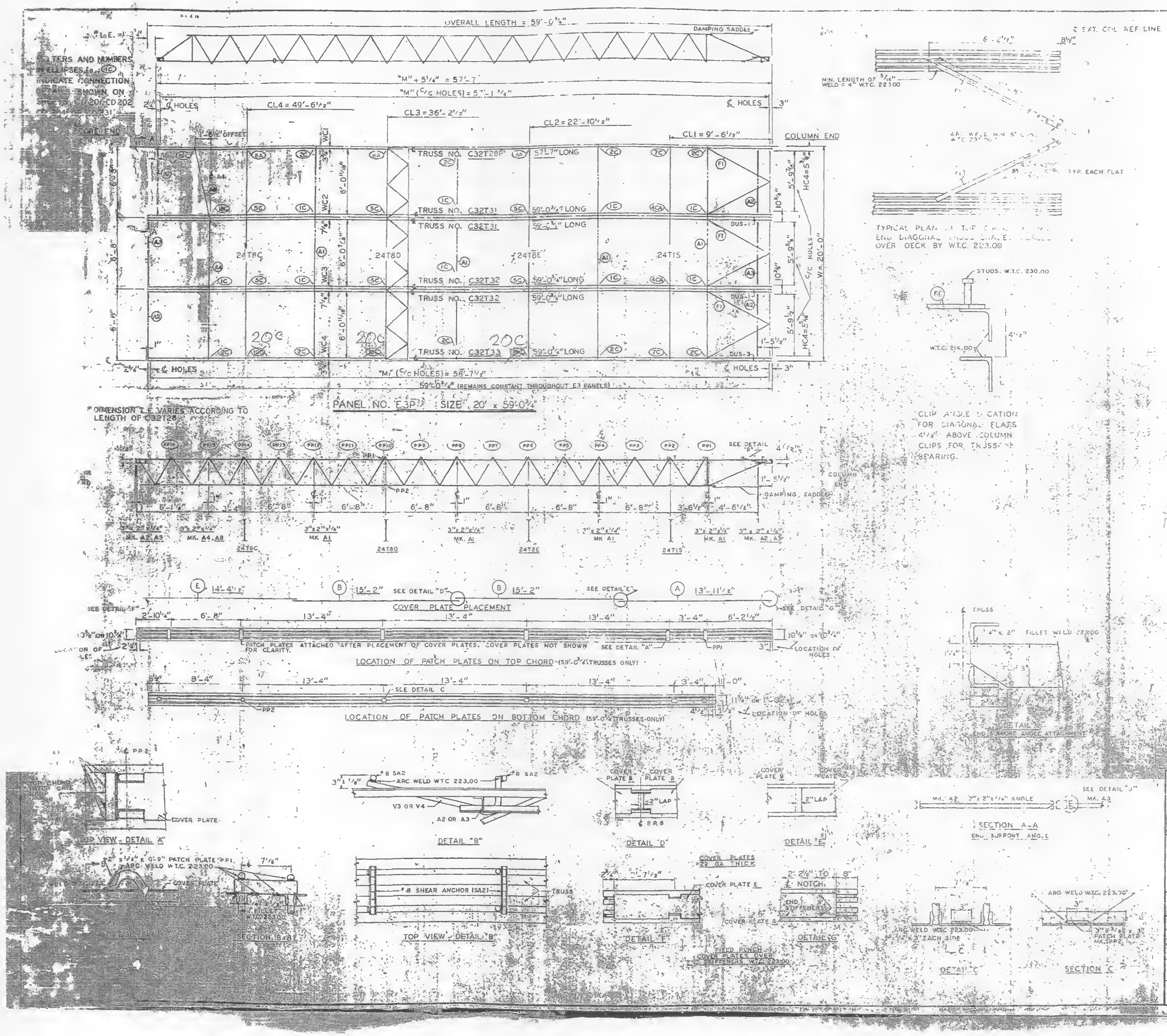
SKILLING · HELLE
CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
7/31/69

FLOOR PANEL DETAILS
WORLD TRADE CENTER N.Y.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (SOUTH)
PANEL E3C - 20' x 59'-8"
BLDG. B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-49 | PLATE |
| APPROVED FOR FABRICATION BY ___ FOR P.O.N.Y.A | DATE | DRAWN BY: gdc<br>DATE APRIL 2, 1969 | |
| APPROVED FOR FABRICATION BY ___ FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA<br>DATE APRIL 2, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY [illegible] | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E3C |


OVERALL LENGTH = 59'-0 3/4"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES e.g. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202
℄ EXT. COL. REF. LINE
"M" + 5 1/4" = 57'-7"
"M" (C/C HOLES) = 57'-1 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
℄ HOLES
COLUMN END
TRUSS NO. C32T28P 57'-7" LONG
TRUSS NO. C32T31 59'-0 3/4" LONG
TRUSS NO. C32T32 59'-0 3/4" LONG
TRUSS NO. C32T33 59'-0 3/4" LONG
24T8C
24T8D
24T8E
24T15
DUS-1
DUS-3
HC4 = 5 3/4"
C/C HOLES
W = 20'-0"
"M" (C/C HOLES) = 58'-7 1/4"
59'-0 3/4" (REMAINS CONSTANT THROUGHOUT E3 PANELS)
PANEL NO. E3P SIZE 20' x 59'-0 3/4"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28
20C
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
TYP. EACH FLAT
TYPICAL PLAN OF THE CONNECTION END DIAGONAL TRUSS BRACE, PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
COLUMN END
DAMPING SADDLE
PP1 PP2
MK. A2, A3
MK. A4, A8
MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)
SEE DETAIL C
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)
LOCATION OF HOLES
TRUSS
1/4" x 2" FILLET WELD 223.00
DETAIL END SUPPORT ANGLE ATTACHMENT
COVER PLATE
TOP VIEW - DETAIL "A"
2" x 1/4" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
SECTION B-B
#8 SA2
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
#8 SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
COVER PLATE B
2" LAP
DETAIL "D"
DETAIL "E"
COVER PLATES 20 GA. THICK
COVER PLATE E
DETAIL "F"
2 1/4" NOTCH
END STIFFENER
DETAIL "G"
FIELD PUNCH COVER PLATES OVER STIFFENERS W.T.C. 223.00
MK. A2 3" x 2" x 1/4" ANGLE
MK. A3
SEE DETAIL "J"
SECTION A-A
END SUPPORT ANGLE
ARC WELD W.T.C. 223.00
3" x 3/8" PATCH PLATE MK. PP2
DETAIL "C"
SECTION C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | M.K. | PCS. | SIZE | |
| FLOOR TRUSSES | T28P | 1 | C32T28P 57'-7" | ST 228P |
| | T31 | 2 | C32T31 - 59'-0 3/4" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0 3/4" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0 3/4" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | BT 208C |
| | T8D | 1 | 24T8D - 19'-11" | BT 208D |
| | T8E | 1 | 24T8E - 19'-11" | BT 208E |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-1" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5' [illegible] | ST 403 |
| | A4 | [illegible] | [illegible] | ST 403 |
| | A8 | [illegible] | [illegible] | ST 405 |
| DIAGONAL FLATS | | [illegible] | [illegible] | [illegible] |
| [illegible] PLATES | A | [illegible] | [illegible] | ST 303 |
| | B | [illegible] | [illegible] x 15'-2 | ST 303 |
| | [illegible] | [illegible] | [illegible] x 4'-4 1/4 | ST 303 |
| ANGLE CLIPS | C1 | [illegible] | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | 3 1/2" x 2 1/2" x 3/8" x 5'-6 7/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 2 1/2" x 3/8" x 3'-8 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 4 | 1 5/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 8 | [illegible]8" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | [illegible] | ST 400 |
| | P2 | 1 | 4" x 2" x [illegible] x 0'-8" | ST 400 |
| | P3 | 1 | 4" x 2" x [illegible] x 0'-0" | ST 400 |
| | P5 | 3 | 4" x 2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4" x 2" x [illegible] x 0'-4" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | [illegible] | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

6 1/2" x 2" x 2'-9"

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

| | |
|---|---|
| 7-A62-10 | 7-22-68 |
| 7-A63-49 | 1-6-69 |
| 7-A64-3 | 10-15-68 |
| 7-A64-15 & 16 | 7-22-68 |
| 7-A64-42 | 10-15-68 |
| SA-124 | 1-8-69 |
| 7-A81-25 & 28 | 1-6-69 |
| 7-A81-29 & 30 | 1-6-69 |
| 7-A82-19 | 1-6-69 |

FLOOR PANEL DETAILS

WORLD TRADE CENTER N.Y.C.

FOR

PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (NORTH)

PANEL E3P 20' x 59'-0 3/4"

BLDG. B FLOORS 78 (WEST)

SKILLING HELLE CHRISTIANSEN ROBERTSON

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-A83 49

PLATE

APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE

DRAWN BY: G.S.C. DATE APRIL 2, 1969

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE

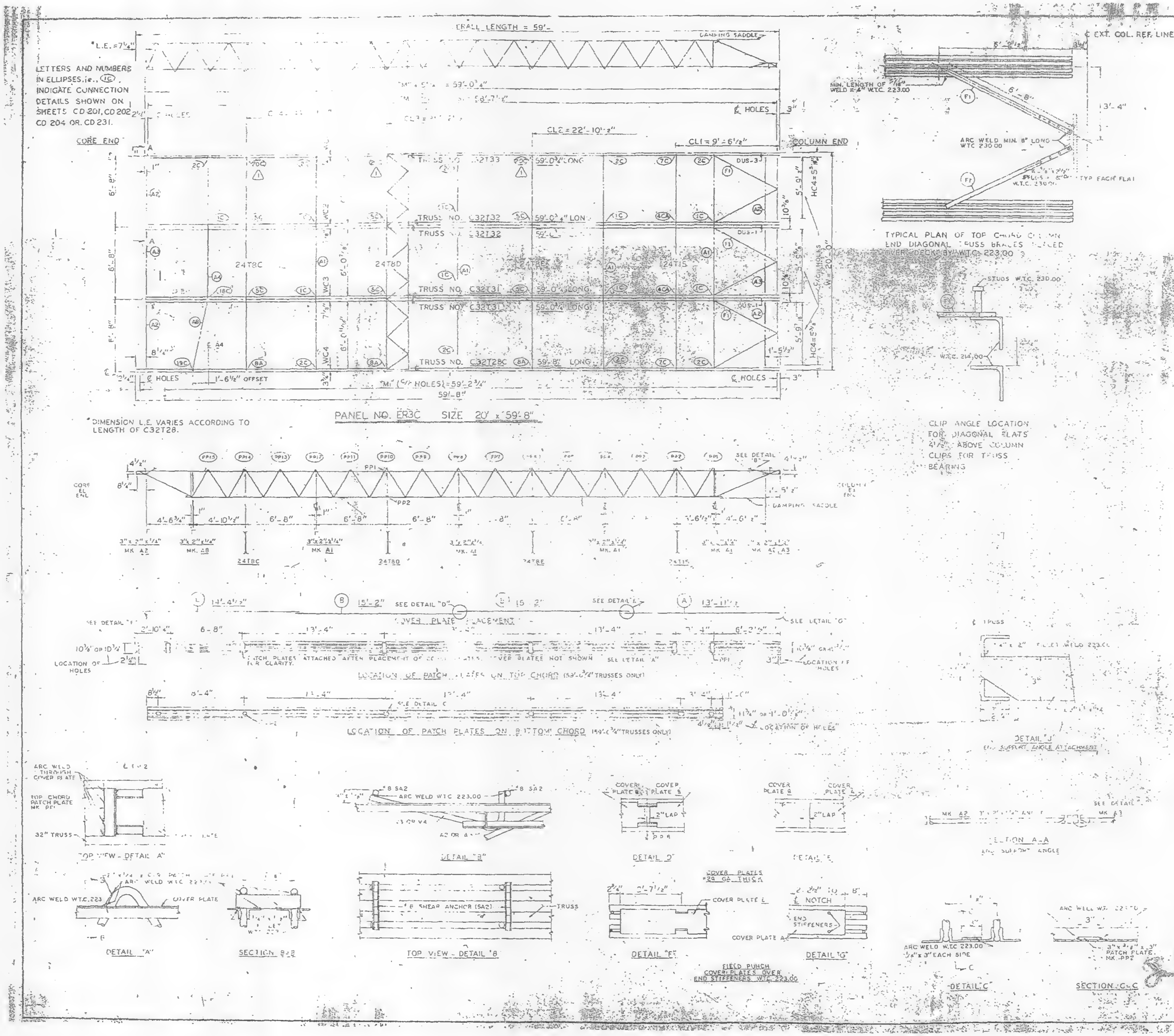
CHECKED BY: T.M. CHURA DATE APRIL 2, 1969

IN CHARGE OF PROD. DEV.

DETAILED BY

FABRICATION CONT. NO. W.T.C. 321

SHEET NO. FP E3P


"L.E.=7¼"
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231.
CORE END
COLUMN END
DAMPING SADDLE
℄ HOLES
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T33 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T28C 59'-8" LONG
24T8C
24T8D
24T8E
24T15
DUS-3
DUS-1
1'-6½" OFFSET
"MI" (℄ HOLES) = 59'-2¾"
59'-8"
PANEL NO. ER3C SIZE 20' x 59'-8"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD 2-4" W.T.C. 223.00
ARC WELD MIN. 8" LONG W.T.C. 230.00
TYP. EACH FLAT
13'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES FLUSHED OVER DECKS BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING
DAMPING SADDLE
3"x2"x¼" MK. A2
3"x2"x¼" MK. A8
3"x2"x¼" MK. A1
14'-4½"
15'-2"
13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)
FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223.00
DETAIL "B"
COVER PLATE B
COVER PLATE
2" LAP
DETAIL "D"
DETAIL "E"
ARC WELD W.T.C. 223
COVER PLATE
DETAIL "A"
SECTION B-B
8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #20 GA. THICK
COVER PLATE L
COVER PLATE A
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
℄ NOTCH
END STIFFENERS
DETAIL "G"
ARC WELD W.T.C. 223.00 ¼"x3" EACH SIDE
DETAIL "C"
3"x¾"x3" PATCH PLATE, MK. PP2
SECTION C-C

| REQUIRED | | | | REF. |
|---|---|---|---|---|
| MATERIAL | | | | DWG. |
| FLOOR TRUSSES | T28C | 1 | C32T28C - 59'-8" | ST 228C |
| | T31 | 2 | C32T31 - [illegible] | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | [illegible] - 19'-11" | BT [illegible]8C |
| | T8D | 1 | [illegible] - 19'-11" | BT [illegible]8D |
| | T8E | 1 | [illegible] - 19'-11" | BT [illegible]8E |
| | T15 | | [illegible] - 15'-11" | BT [illegible] |
| 3"x 2"x¼" ANGLE | A1 | 4 | [illegible] 19'-11" | ST 403 |
| | A2 | 4 | [illegible] 5'-11" | ST 403 |
| | A3 | [illegible] | [illegible] 5'-11" | ST 403 |
| | A4 | [illegible] | [illegible] | [illegible] 403 |
| | A8 | [illegible] | [illegible] 2" x [illegible] | ST 403 |
| DIAGONAL FLATS | [illegible] | [illegible] | [illegible] 8' | [illegible] |
| COVER PLATE | A | [illegible] | [illegible] .0135" x 13'-11½" | ST 303 |
| | B | [illegible] | [illegible] x .0135" x 15'-2" | ST 303 |
| | E | [illegible] | [illegible] x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIP | C1 | [illegible] | 2"x1½"x¼"x 0'-6" | ST 400 |
| | C2 | 4 | [illegible] x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½" x [illegible] | ST 298 |
| | DUS-3 | 1 | 3½"x 3½" x [illegible] | ST 298 |
| CONNECTION BAR | CB1 | 1 | [illegible] x 1'-3" | ST 400 |
| | CB2 | 6 | [illegible] x 1'-3" | ST 400 |
| CONNECTION PLATES | P15 | 6 | 6½" x ½" x 2'-9" | ST 416 |
| | P1 | 5 | 3½" x [illegible] | ST 400 |
| | P2 | [illegible] | [illegible] | ST 400 |
| | P3 | 1 | 4½" x [illegible] | ST 400 |
| | P5 | [illegible] | 4½" x [illegible] x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x [illegible] | ST 400 |
| 8 SHEAR ANCHOR | SA2 | [illegible] | 8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x [illegible] x 0'-3" | ST 400 |
| | PP2 | 18 | 3" x ¾" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

| NO. | DATE | REVISION | |
|---|---|---|---|
| 1 | 8-4-69 | AS NOTED | C.D.C. |

| | |
|---|---|
| [illegible] 10 | 7-22-68 |
| 7-AB3-50 | 1-6-69 |
| [illegible] | 10-15-68 |
| [illegible] | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA [illegible] | 1-6-69 |
| 7-AB 29 & 30 | 1-6-69 |
| 7-AB1-33 & 34 | 1-6-69 |
| 7-AB2-19 | 1-6-69 |

NEW YORK [illegible]

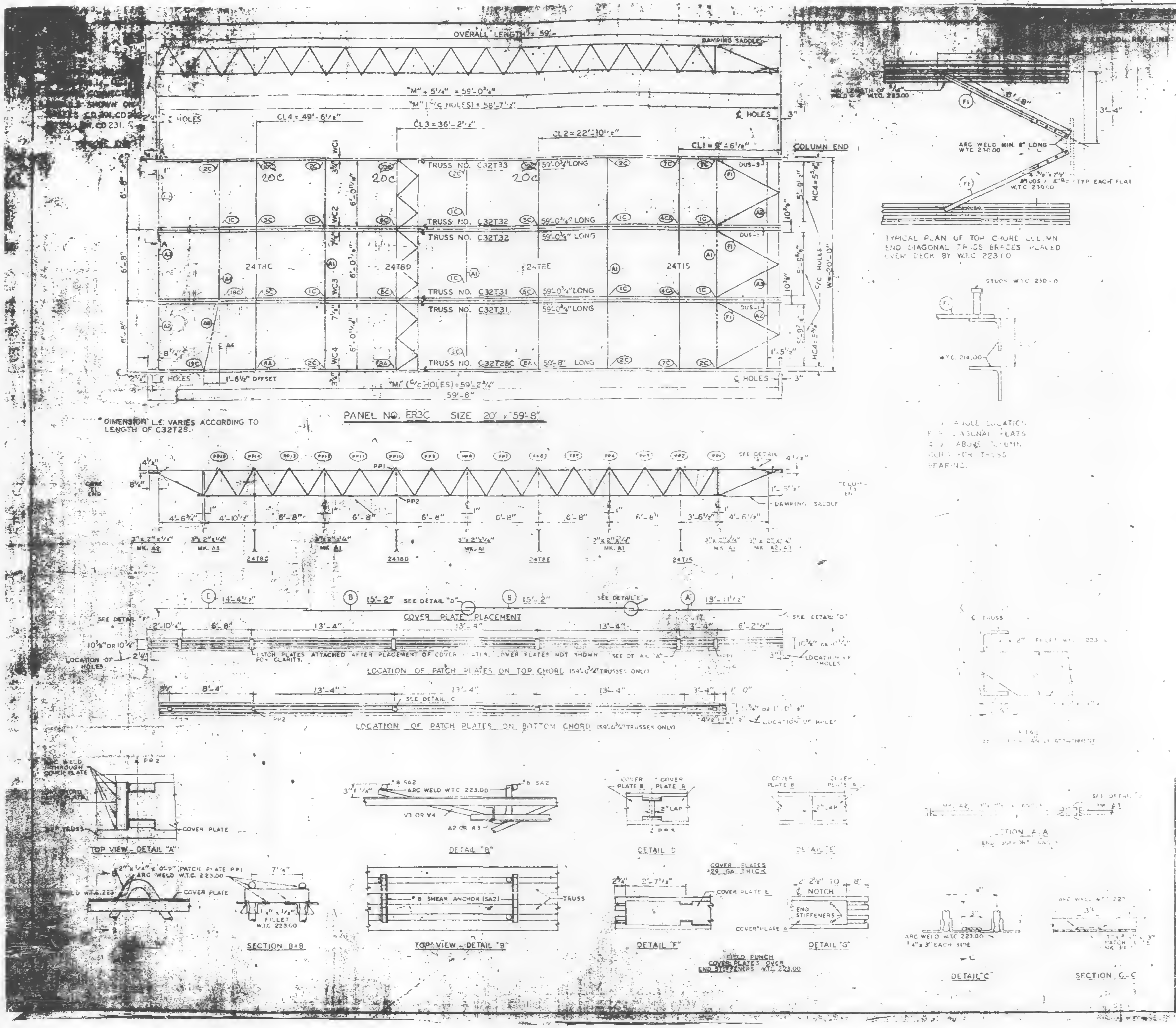
[illegible] 78 (SOUTH)

PANEL ER3C - 20' x 59'-8"

BLDG. B FLOORS 78 (EAST)

FABRICATION BY [illegible] STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATE AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7 AB3 50 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. | DATE 8/11/69 | DRAWN BY [illegible] DATE APRIL 2, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T. MACHURA DATE APRIL 2, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. [illegible]221 | SHEET NO. EP ER3C |



| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | |
| FLOOR TRUSSES | T28C | 1 | C32T28C - 59'-8" | ST 228C |
| | T31 | 2 | C32T31 - 59'-0 3/4" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0 3/4" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0 3/4" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C 19'-11" | BT [illegible]8C |
| | T8D | 1 | 24T8D 19'-11" | BT 2.8D |
| | T8E | 1 | 24T8E 19'-11" | BT [illegible]08E |
| | T15 | 1 | [illegible] 19'-11" | BT 15 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | [illegible] 18'-11" | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | [illegible] | [illegible] | 403 |
| | A4 | [illegible] | [illegible] | 403 |
| | A6 | [illegible] | 3" x 2" x [illegible] | ST 403 |
| DIAGONAL FLATS | [illegible] | [illegible] | [illegible] 9' | [illegible] |
| [illegible] PLATES | A | [illegible] | [illegible] x 13'-11 1/2" | ST 303 |
| | B | [illegible] | [illegible] .0135" x 15'-2" | ST 303 |
| | E | [illegible] | [illegible] .0135" x 4'-4 1/2" | ST 303 |
| [illegible] | C1 | [illegible] | [illegible] x 0'-8" | [illegible] 410 |
| | C | 4 | [illegible] | [illegible] 410 |
| DAMPING SADDLE | [illegible] | [illegible] | [illegible] 5'-6 3/4" | 238 |
| | DUS[illegible] | [illegible] | [illegible] 3 x 5'-6 3/4" | 238 |
| CONNECTION BAR | CB1 | [illegible] | [illegible] | [illegible] 410 |
| | CB2 | [illegible] | [illegible] | [illegible] 410 |
| | CB3 | [illegible] | [illegible] | 410 |
| CONNECTION PLATES | P1 | [illegible] | [illegible] | 400 |
| | P2 | 1 | [illegible] | 400 |
| | P3 | 1 | [illegible] | 400 |
| | P5 | [illegible] | [illegible] 1'-6" | 400 |
| | P[illegible] | [illegible] | [illegible] | ST 400 |
| [illegible] | SA2 | [illegible] | [illegible] | 400 |
| PATCH PLATES | PP1 | [illegible] | [illegible] 8" | ST 400 |
| | PP2 | [illegible] | [illegible] 3" | 400 |

6 1/2" x 1/2" x 2'-9"

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] EQUA.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE [illegible] FILLET THROAT FILLET

A = 1/4"
B = 1/4"

| NO. | REVISION | |
|---|---|---|
| | 7-A[illegible]-10 | 7-22-68 |
| | 7-A83-50 | 1-6-69 |
| | 7-[illegible] | 10-15-68 |
| | [illegible] | 7-22-68 |
| | 7-A[illegible] | 10-15-68 |
| | S[illegible]4 | 1-6-69 |
| | 7-A81-29 & 30 | 1-6-69 |
| | A81-33 & 34 | 1-6-69 |
| | 7-A82-19 | 1-6-69 |

SKILLING HELLE CHRISTIANSEN ROBERTSON
Structural Engineers

7/31/69

[illegible] FLOORS 78 (SOUTH)

PANEL ER3C - [illegible] 59'-8"

BLDG. B FLOORS 78 (EAST)

FABRICATION BY ALLEGHENY [illegible] COMPANY

FABR. DATE.
AT MADISON, ILLINOIS

DESIGN DRAWING NO.
7 A83-50

APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY | DATE

DRAWN BY: [illegible]
DATE APRIL 2, 1969

APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE

CHECKED BY: T.M. CHURA
DATE APRIL 2, 1969

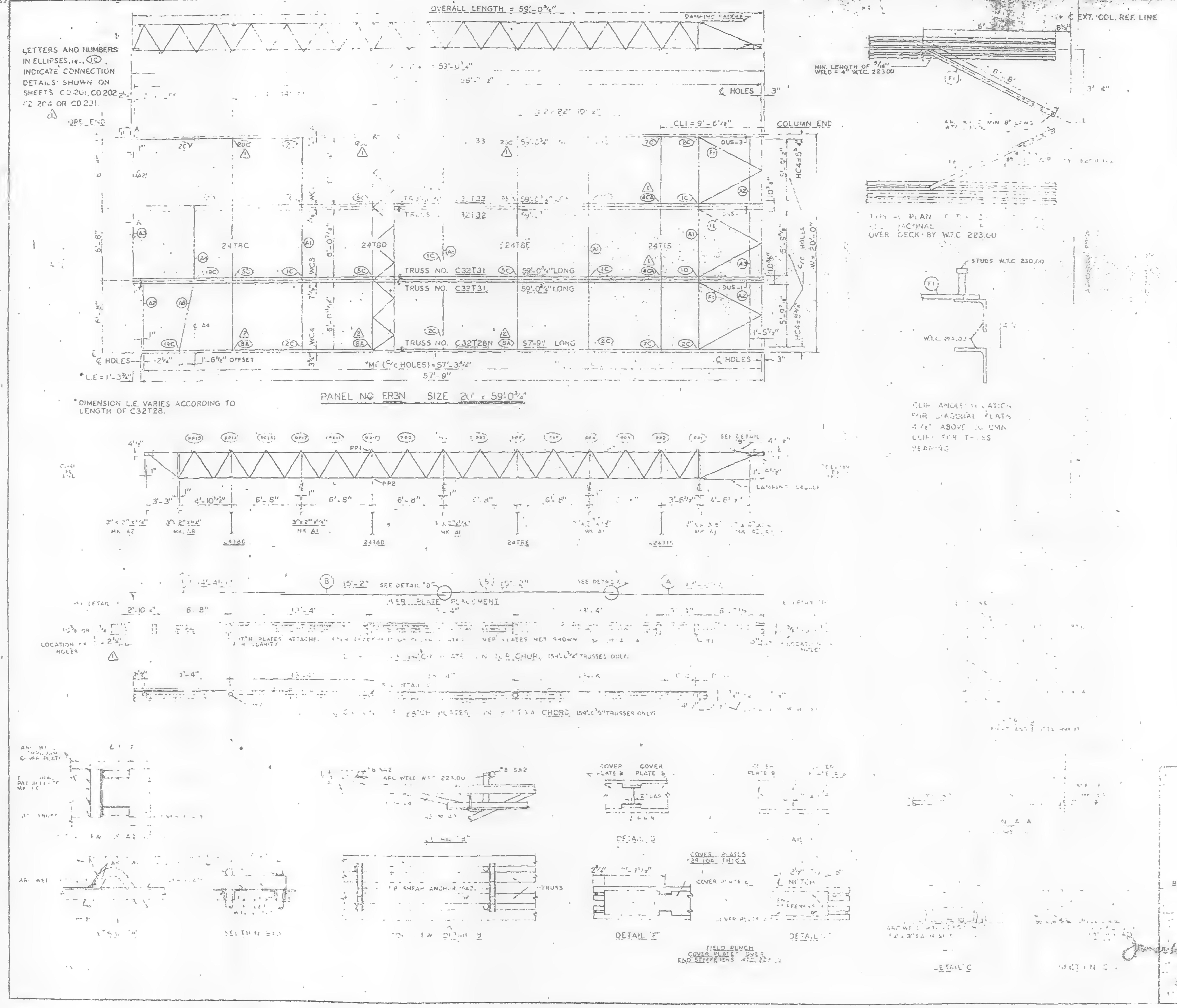
IN CHARGE
PROD. [illegible]

DETAILED BY: [illegible]

FABRICATION CONT. NO.
W.T.C. [illegible]

ER-3C

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231.



*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

| | | | | |
|---|---|---|---|---|
| | T28N | 1 | C32T28N - 57'-9" | 228N |
| | T31 | 2 | C32T31 | 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | 232 |
| | T33 | 1 | C32T33 | 233 |
| | C | | C | 8C |
| | E | | E | D |
| | E | | E | E |

| | | | | |
|---|---|---|---|---|
| [illegible] | C1 | | [illegible] x 4" x 0'-8" | ST 400 |
| | C[illegible] | 4 | [illegible] x 5" | ST 400 |
| DAMPING SADDLE | DUS-[illegible] | | [illegible] | [illegible] |
| | DUS-3 | | [illegible] | [illegible] |
| CONNECTION BASE | CE1 | | [illegible] | [illegible] |
| | CE2 | | [illegible] | [illegible] |
| CONNECTION PLATES ⚠2 | P15 | 6 | 6½" x ½" x 2'-9" | [illegible] |
| | [illegible] | | [illegible] | [illegible] |
| | P[illegible] | | [illegible] | 400 |
| | P3 | 1 | [illegible] | [illegible] |
| | P5 | | [illegible] 1'-6" | 400 |
| | P[illegible] | | [illegible] | [illegible] |
| [illegible] | SA2 | | [illegible] | [illegible] |
| PATCH PLATES | PP[illegible] | 13 | [illegible] 3" | ST 400 |
| | PP2 | [illegible] | 3" x [illegible] 3" | [illegible] 400 |

(1) ALL [illegible] WELD [illegible]

(2) UNLESS OTHERWISE [illegible] CONNECTION ARE WELDS TO BE [illegible] FULL THROAT FILLET

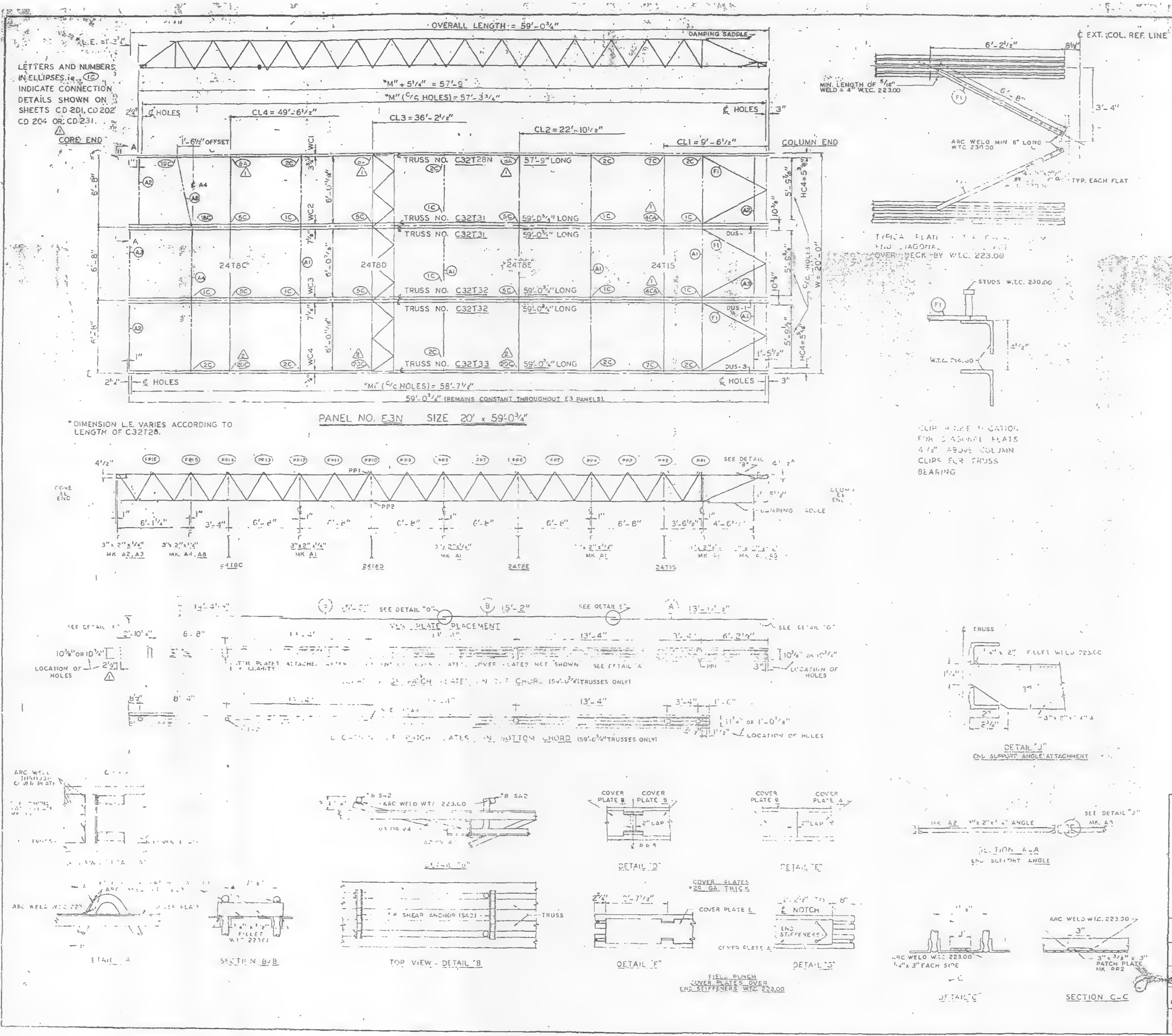
A = [illegible]
B = [illegible]

| | | | |
|---|---|---|---|
| ⚠2 | 8-4-69 | AS NOTED | G.D.C. |
| ⚠1 | 4-24-69 | AS NOTED | G.D.C. |
| | | | BY |

7-A83-50 1-6-69
10-15-68
7-22
10-15
1-6-69
29 & 30 1-6-69
33 & 34 1-6-69
7-A82-19 1-6-69

44 (NORTH ONLY)
ER3N 59'-0¾"
BLDG. B FLOORS 44 (EAST & WEST)

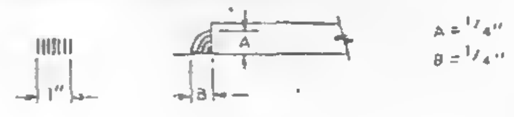
50
8/11/69
APRIL 2, 1969
APRIL 2, 1969
FABRICATION CONT. NO. 221
SHEET NO. FP ER3N



| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T28N | 1 | C32T28N - 57'-9" | ST 228N |
| | T31 | 2 | C32T31 - 59'-0¾" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | BT 208C |
| | T8D | 1 | 24T8D - 19'-11" | BT 208D |
| | T8E | 1 | 24T8E - 19'-11" | BT 208E |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x 6'-8⅜" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x [illegible]'-9" | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ɸ x 1'-3" | ST 400 |
| | CB2 | 4 | ¹³⁄₁₆" ɸ x 1'-3" | ST 400 |
| CONNECTION PLATES ⚠2 | P15 | [illegible] | 6½" x ½" x 2'-9" | ST 416 |
| | P1 | 5 | [illegible] x ⅜" x [illegible] | ST 400 |
| | P2 | 1 | 4½" x [illegible]" x 0'-0" | ST 400 |
| | P3 | 1 | 4½" x [illegible]" x [illegible]'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | PC | 1 | 4[illegible] x [illegible] x 0'-[illegible]" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | [illegible] | #8 REBAR x 0'-[illegible]" | ST 410 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



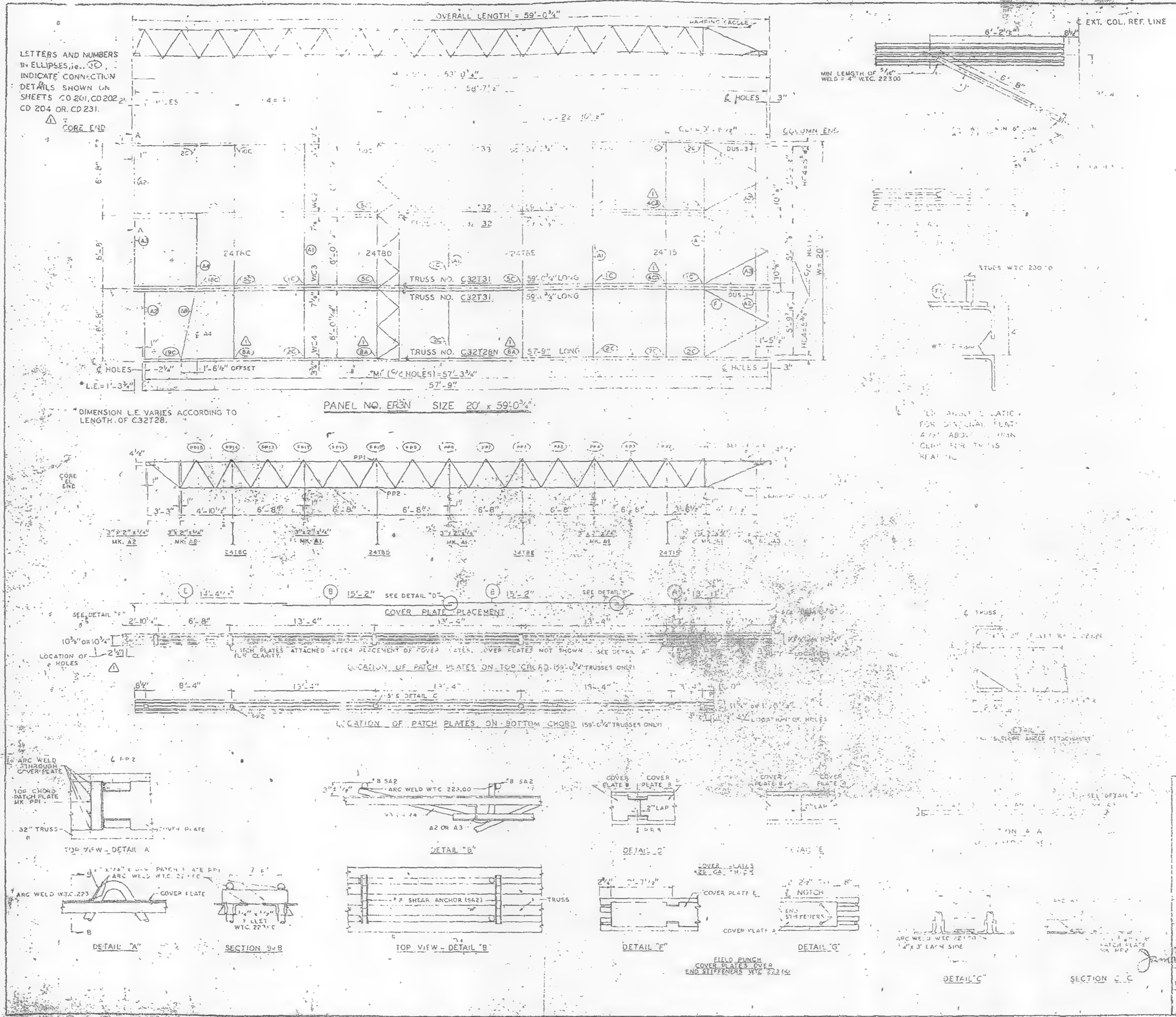
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| ⚠2 | 8-4-69 | AS NOTED | G.D.C. |
| ⚠1 | 4-24-69 | AS NOTED | G.D.C. |

| REF. DRWGS. | |
|---|---|
| 7-AB2-10 | 7-22-68 |
| 7-AB1-49 | 1-6-69 |
| 7-AB4-[illegible] | 10-15-68 |
| 7-AB4-5 & 6 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| S4-124 | 1-6-69 |
| 7-AB1-25 & 28 | 1-6-69 |
| 7-AB1-29 & 30 | 1-6-69 |
| 7-AB2-19 | 1-6-69 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (NORTH ONLY)
PANEL E3N - 20' x 59'-0¾"
BLDG. B FLOORS 44 (WEST & EAST) ⚠1

| | | | |
|---|---|---|---|
| FABRICATED BY [illegible] STEEL COMPANY | | | |
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7 AB3 49 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A. James [illegible] | DATE 8/11/69 | DRAWN BY g.d.c. DATE APRIL 2, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M. CHURA DATE APRIL 2, 1969 | IN CHARGE OF PROD. DEV. |
| [illegible] STEEL CO. DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E3N |



| | | | | |
|---|---|---|---|---|
| | T28N | 1 | C32T28N - 57'-9" | S 228N |
| | T31 | 2 | C32T31 - 59'-0¾" | S 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | S 232 |
| | T33 | 1 | C32T33 | S 233 |
| ANGLES & SADDLES | DUS-1 | | [illegible] | [illegible] |
| | DUS-3 | | [illegible] | [illegible] |
| CONNECTION BARS | CB1 | | [illegible] | [illegible] |
| | CB2 | | [illegible] | [illegible] |
| | CB3 | 5 | [illegible] | [illegible] |
| CONNECTION PLATES | F1 | | [illegible] | [illegible] |
| | F2 | | [illegible] | [illegible] |
| | F3 | | [illegible] | [illegible] |
| | F5 | | [illegible] | 400 |
| | PF | | [illegible] | [illegible] |
| | SA2 | | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 18 | 2"x[illegible] x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x¾" x 1'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

A = ¼"
B = 1½"

| | | | |
|---|---|---|---|
| ⚠1 | 4-24-69 | AS NOTED | |
| NO. | DATE | REVISION | BY |

| | |
|---|---|
| 7-AB2-10 | 7-22-68 |
| 7-AB3-50 | 1-6-69 |
| 7-A[illegible] | 10-15-68 |
| [illegible] | 7-22-68 |
| 7-AB[illegible] | 10-15-68 |
| [illegible] | 1-6-69 |
| 7-AB1 29 & 30 | 1-6-69 |
| 7-AB1 33 & 34 | 1-6-69 |
| 7-AB2-19 | 1-6-69 |

DETAILS

44 (NORTH ONLY)

ER3N 59'-0¾"

BLDG. B FLOORS 44 (EAST & WEST)

AS IN DRAWING
A&I 50

PLATE

APPROVED FOR FABRICATION FOR PONYA
DATE 7/28/69

DRAWN BY [illegible]
DATE APRIL 2, 1969

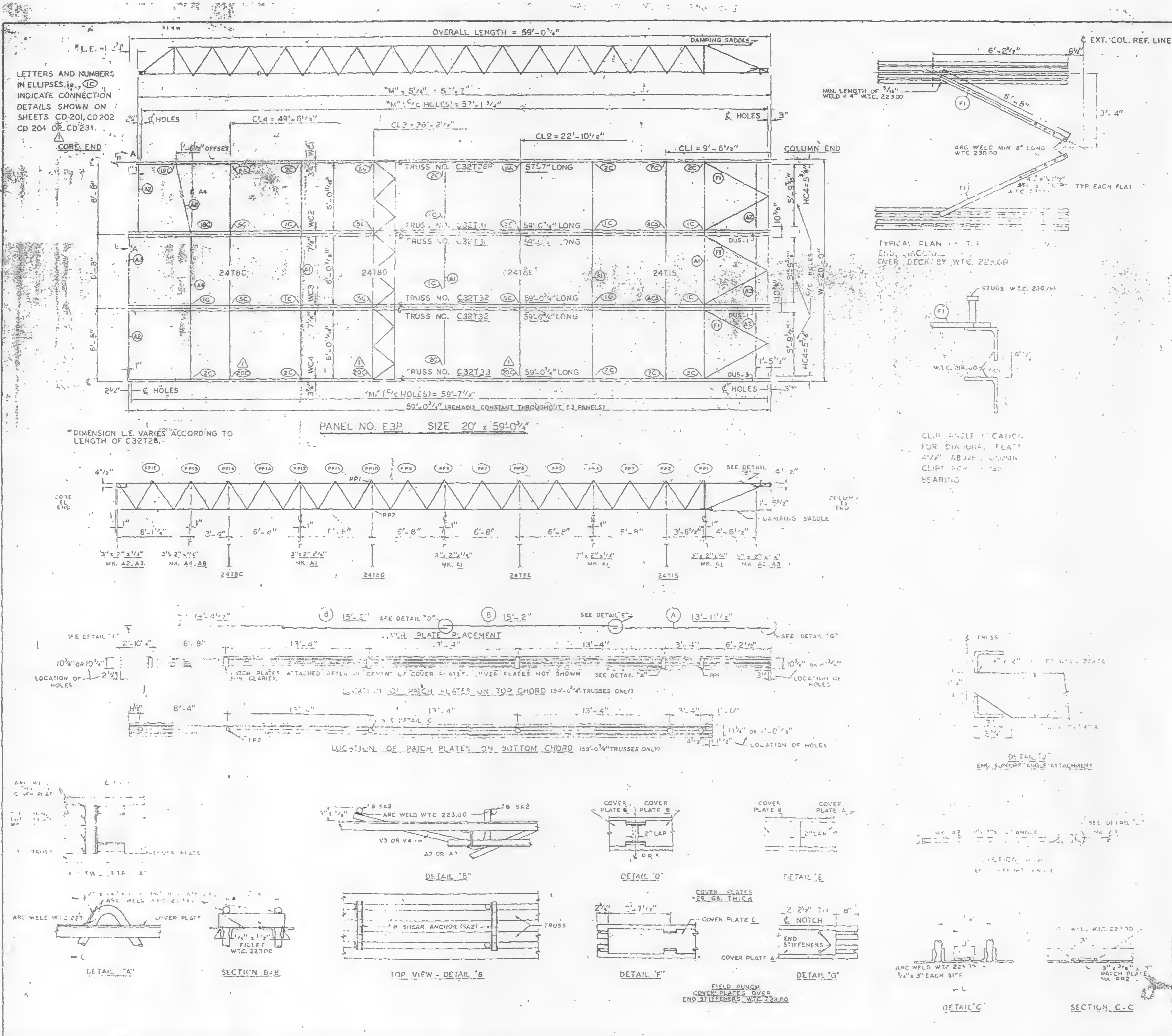
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE

CHECKED BY M. CHURA
DATE APRIL 2, 1969

IN CHARGE OF PROD. DEV.

FABRICATION CONT. NO. W.T.C. 221

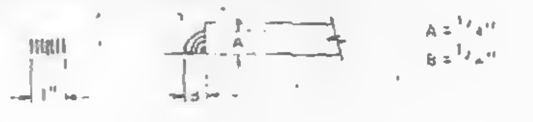
SHEET NO. FP-ER3N



| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T28P | 1 | C32T28P - 57'-7" | ST 228P |
| | T31 | 2 | C32T31 - 59'-0¾" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | BT 208C |
| | T8D | 1 | 24T8D - 19'-11" | BT 208D |
| | T8E | 1 | 24T8E - 19'-11" | BT 208E |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼" x 5'-11⅞" | ST 403 |
| | A3 | 2 | 3"x 2"x¼" x 5'-11⅞" | ST 403 |
| | A4 | 1 | 3"x 2"x¼" x 1'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x¼" x [illegible] | ST 405 |
| DIAGONAL FLATS | [illegible] | 6 | [illegible] | [illegible] |
| COVER PLATES | A | 3 | 9"x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9"x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135" x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | [illegible] | 2"x 1½"x¼"x 0'-6" | ST 400 |
| | C2 | 4 | 2½"x 1½"x¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x⅜"x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½"x 3½"x⅜"x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 6 | 1⅛" ⌀ x 1'-3" | ST 400 |
| CONNECTION PLATES △1 | F1 | 6 | 6½" x ½"x 2'-9" | ST 416 |
| | [illegible] | 5 | [illegible] | ST 400 |
| | F[illegible] | 1 | [illegible] | ST 400 |
| | P3 | 1 | [illegible] | ST 400 |
| | P5 | 3 | [illegible] x 1'-6" | ST 400 |
| | PC | 1 | [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | [illegible] | #8 REBAR x 0'-[illegible]" | [illegible] |
| PATCH PLATES | PP1 | 18 | 2"x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/16" x 0'-3" | ST 410 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| △1 | 8-4-69 | AS NOTED | G.D.C. |

| [illegible] | |
|---|---|
| [illegible] 10 | 7-22-68 |
| [illegible] 49 | 1-6-69 |
| [illegible] | 10-15-68 |
| [illegible] 4 | 7-22-68 |
| [illegible] 42 | 10-15-68 |
| [illegible] 24 | 1-6-69 |
| [illegible] 25 & 28 | 1-6-69 |
| 7-AB1-29 & 30 | 1-6-69 |
| 7-AB2-19 | 1-6-69 |

FLOOR PANEL DETAILS

BLDG. [illegible] FLOORS 78 (NORTH)

PANEL E3P [illegible] 59'-0¾"

BLDG. B FLOORS 78 (WEST)

FABRICATOR [illegible] STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 8/11/69

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE

DETAILED BY: A. CARL WEBER

DESIGN DRAWING NO. 7-AB3-49

DRAWN BY G.D.C. DATE APRIL 2, 1969

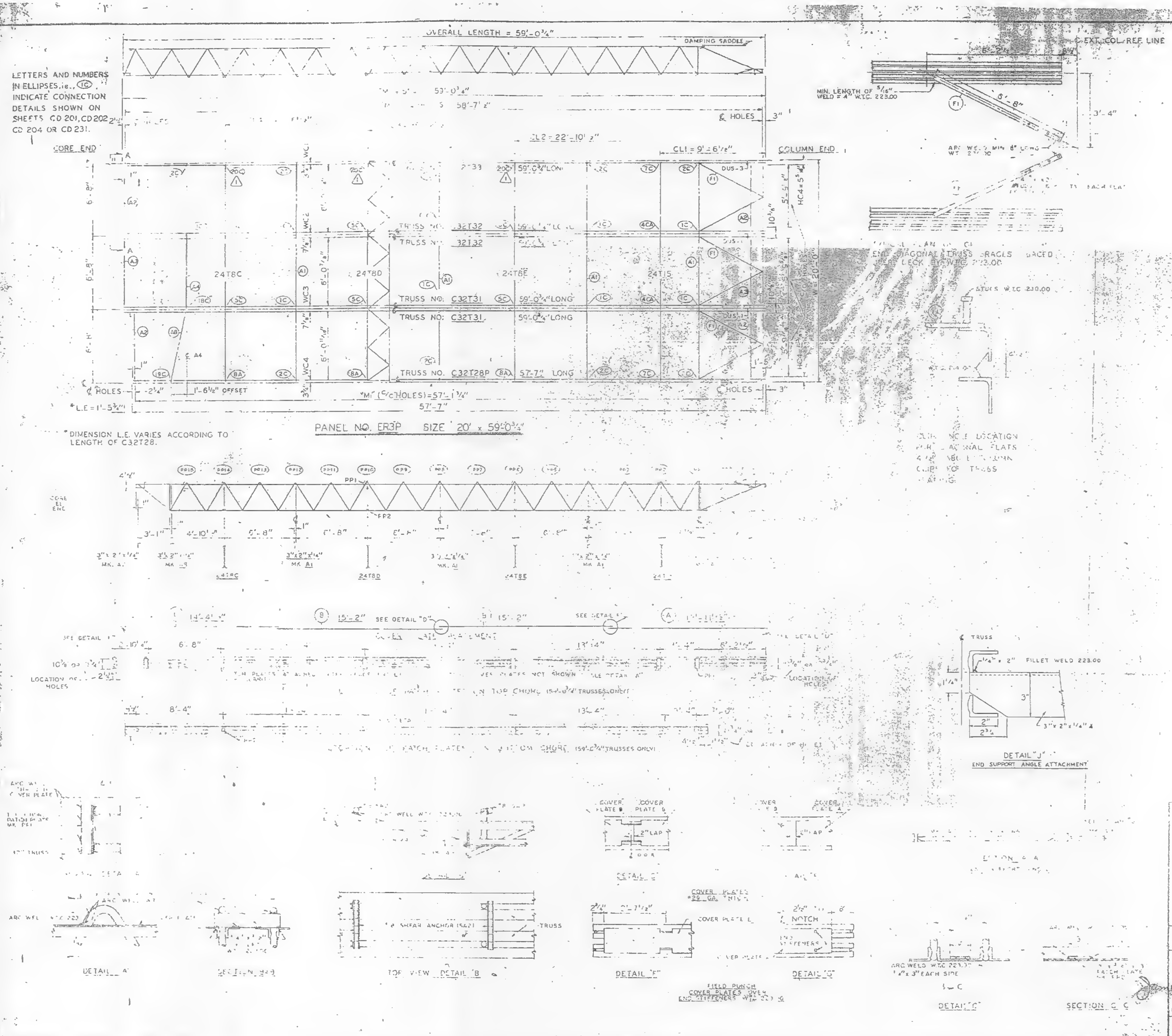
CHECKED BY: T.M. CHURA DATE APRIL 2, 1969

FABRICATION CONT. NO. W.T.C. 221

PLATE

IN CHARGE OF PROD. DEV.

SHEET NO. FP E3P



LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231.
OVERALL LENGTH = 59'-0¾"
DAMPING SADDLE
℄ EXT. COL. REF. LINE
CORE END
COLUMN END
CL2 = 22'-10½"
CL1 = 9'-6⅞"
℄ HOLES
TRUSS NO. C32T33 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T32
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T28P 57'-7" LONG
24T8C
24T8D
24T8E
24T15
WC2
WC3
WC4
HC4
DUS-3
℄ HOLES
1'-6½" OFFSET
"M" (℄/℄ HOLES) = 57'-1¼"
57'-7"
*L.E = 1'-5¾"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5'-8"
3'-4"
PANEL NO. ER3P SIZE 20' x 59'-0¾"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.
PP1
PP2
3"x2"x¼" MK. A1
24T8C
24T8D
24T8E
SEE DETAIL "D"
15'-2"
FILLET WELD 223.00
3"x2"x¼" A
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
LOCATION OF HOLES
DETAIL "A"
SECTION "B-B"
TOP VIEW DETAIL "B"
DETAIL "E"
DETAIL "G"
DETAIL "C"
SECTION "C-C"
COVER PLATES #20 GA. THICK
COVER PLATE E
NOTCH
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
ARC WELD W.T.C. 223.00 ¼"x3" EACH SIDE
8 SHEAR ANCHOR (SA2)
TRUSS

| REQUIRED MATERIAL TABLE | | | | |
|---|---|---|---|---|
| MATERIAL | MK | REQ | SIZE | ST |
| FLOOR TRUSS | T28P | 1 | C32T28P - 57'-7" | 228P |
| | T31 | 2 | C32T31 | 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | 232 |
| | T33 | 1 | C32T33 | 233 |
| [illegible] | T8C | | C | 8C |
| | T8D | | D | D |
| | T8E | | E | E |
| | T15 | | [illegible] | [illegible] |
| 3"x2"x¼" [illegible] | A1 | 4 | [illegible] | [illegible] |
| | A2 | 4 | [illegible] | [illegible] |
| | [illegible] | | [illegible] | [illegible] |
| | A6 | | [illegible] | [illegible] |
| DIAGONAL [illegible] | | | B | |
| [illegible] | A | | .013 [illegible] | [illegible] |
| | B | | .013 [illegible] 15'-3" | [illegible] |
| | E | | .0135" x 14-4⅛" | ST 303 |
| ANGLE CLIPS | C1 | | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | | ½ x 3½ x [illegible] 3'-6⅛" | ST 298 |
| | DUS-3 | | ½" x 3½ x [illegible] 3'-6⅛" | ST 298 |
| CONNECTION BAR | CB1 | | [illegible] 3" | ST 400 |
| | CB2 | | [illegible] 3⅜ | ST 400 |
| CONNECTION PLATES ⚠1 | P15 | 6 | 6½" x ½" x 2'-9" | ST 416 |
| | P1 | | [illegible] | [illegible] |
| | P2 | | 4½" x [illegible] | 400 |
| | P3 | 1 | 4½" x [illegible] | 400 |
| | P5 | | 4½" x [illegible] 1'-5" | 400 |
| | P6 | | 4½" x [illegible] | ST 40[illegible] |
| 8 SHEAR ANCHOR | SA2 | | [illegible] | [illegible] |
| PATCH PLATES | PP1 | | 2" x [illegible] 9" | ST 400 |
| | PP2 | 16 | 3" x ⅜ x [illegible] 3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E [illegible] SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

⚠1 8-4-69 AS NOTED

| | | |
|---|---|---|
| | | 7-22-68 |
| | 7-AB3-50 | 1-6-69 |
| | | 10-15-68 |
| | | 7-22-68 |
| | | 10-15-68 |
| | SA [illegible] | 1-6-69 |
| | 29 & 30 | 1-5-69 |
| | 33 & 34 | 1-6-69 |
| | 7-AB2-19 | 1-6-69 |

78 (NORTH)

ER3P - 59'-0¾"

BLDG. 8 FLOORS 78 (WEST)

COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING 7-AB3-50

APPROVED FOR FABRICATION BY James [illegible] FOR P.O.N.Y.A. DATE 8/11/69

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

DRAWN BY [illegible] DATE APRIL 2, 1969

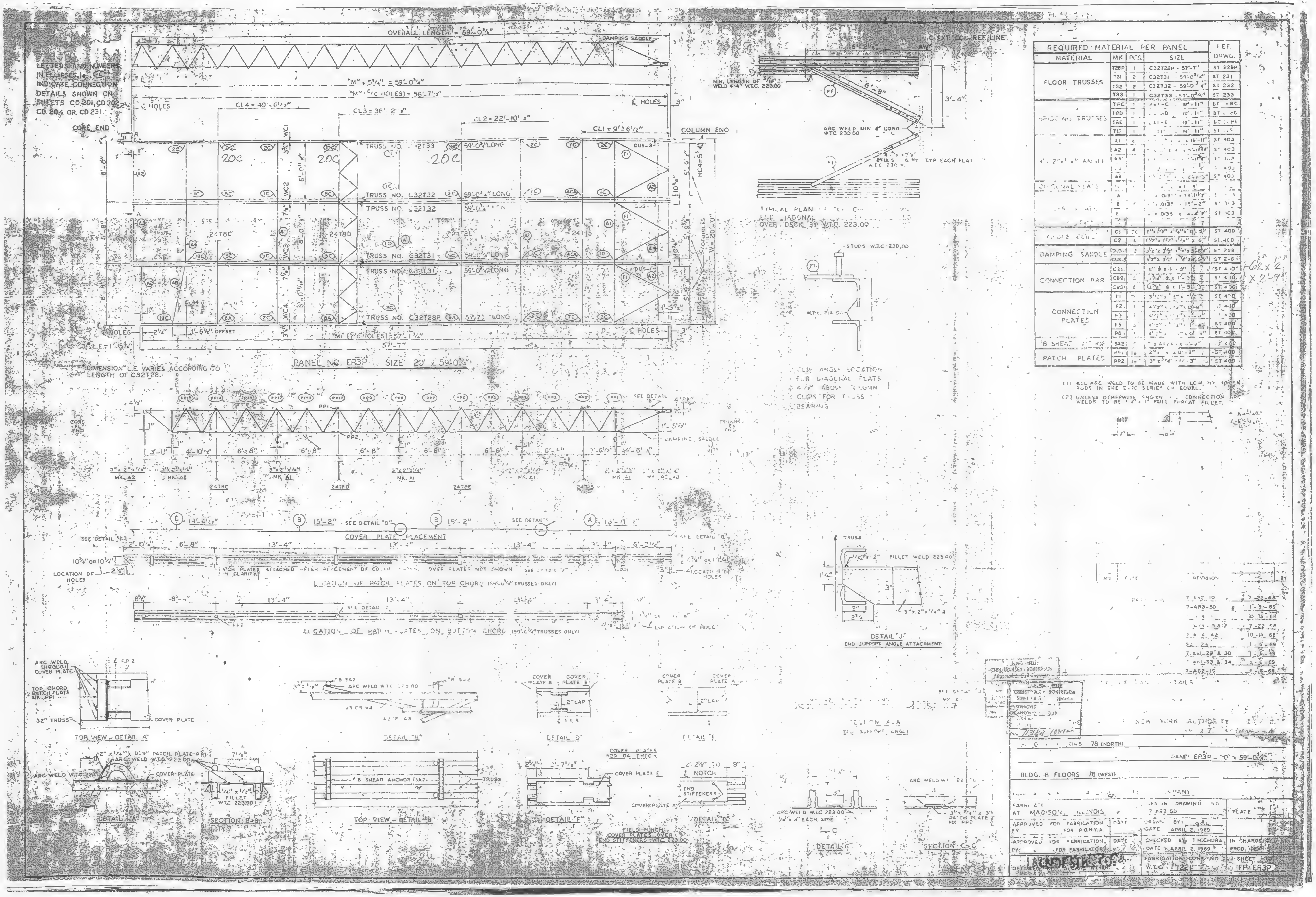
CHECKED BY: T.M.CHIPA DATE APRIL 2, 1969

IN CHARGE OF PROD. DEV.

DETAILED BY: A. CARL WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FP-ER3P


OVERALL LENGTH = 59'-0¾"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231.
"M" + 5¼" = 59'-0¾"
"M" (C/C HOLES) = 58'-7½"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T33 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T32
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T28P 57'-7½" LONG
20C
24T8C
24T8D
24T8E
24T15
WC1
WC2
WC3
WC4
HC4 = 5'-4"
DUS-3
1'-6½" OFFSET
"M" (C/C HOLES) = 57'-1¼"
57'-7"
PANEL NO. ER3P SIZE 20' x 59'-0¾"
DIMENSION "L.E." VARIES ACCORDING TO LENGTH OF C32T28.
C EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
TYPICAL PLAN [illegible] DIAGONAL [illegible] OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING
SEE DETAIL "J"
DAMPING SADDLE
3"x 2"x ¼" MK. A2
3"x 2"x ¼" MK. A1
24T8C
24T8D
24T8E
24T15
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)
TRUSS
FILLET WELD 223.00
3"x 2"x ¼" A
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
#8 SA2
ARC WELD W.T.C. 223.00
DETAIL "B"
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
DETAIL "E"
SECTION A-A
END SUPPORT ANGLE
2"x ¼" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 222.00
ARC WELD W.T.C. 223
COVER PLATE
FILLET W.T.C. 230.00
DETAIL "A"
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #20 GA. THICK
COVER PLATE E
COVER PLATE
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
NOTCH
END STIFFENERS
DETAIL "G"
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
DETAIL "C"
3"x 3/8"x 3" PATCH PLATE MK. PP2
SECTION C-C
62 x 2
x 2'-9"

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T28P | 1 | C32T28P - 57'-7" | ST 228P |
| | T31 | 2 | C32T31 - 59'-0¾" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | ST [illegible]8C |
| | T8D | 1 | [illegible]D - 19'-11" | ST [illegible]8D |
| | T8E | 1 | [illegible]E - 19'-11" | ST [illegible]8E |
| | T15 | 1 | [illegible] - 19'-11" | ST [illegible] |
| 3"x 2"x ¼" ANGLE | A1 | 4 | [illegible] 18'-11" | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | [illegible] | [illegible] | ST 403 |
| | A4 | [illegible] | [illegible] | ST 403 |
| | A8 | [illegible] | [illegible] | ST 403 |
| DIAGONAL PLATE | [illegible] | [illegible] | [illegible] 9' | [illegible] |
| [illegible] | A | [illegible] | [illegible] .0135 x 13'-11½" | ST [illegible]3 |
| | B | [illegible] | [illegible] .0135 x 15'-2" | ST 303 |
| | E | [illegible] | [illegible] .0135 x 4'-4" | ST 303 |
| [illegible] | C1 | [illegible] | 2"x 1½" x ¼" x 0'-5" | ST 400 |
| | C2 | 4 | 1½"x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½" x 3/8" x 3'-6" | ST 298 |
| | DUS-3 | [illegible] | 3½"x 3½" x 3/8" x 3'-[illegible] | ST 298 |
| CONNECTION BAR | CB1 | [illegible] | 1" Φ x 1'-3" | ST 400 |
| | CB2 | [illegible] | [illegible] Φ x 1'-3[illegible] | ST 400 |
| | CB3 | 8 | 1 3/8" Φ x 1'-5[illegible] | ST 400 |
| CONNECTION PLATES | F1 | [illegible] | 3½" x [illegible] | ST 400 |
| | F2 | 1 | 4½" x [illegible] | ST 400 |
| | F3 | 1 | 4½" x [illegible] | ST 400 |
| | F5 | [illegible] | 4½" x [illegible] 1'-6[illegible] | ST 400 |
| | F6 | 1 | 4½" x [illegible] | ST 400 |
| #8 SHEAR ANCHOR | SA2 | [illegible] | [illegible] | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x [illegible] x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ¾" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | | BY |
|---|---|---|---|---|
| | | 7-A82-10 | 7-22-68 | |
| | | 7-A83-50 | 1-6-69 | |
| | | [illegible] | 10-15-68 | |
| | | [illegible] | 7-22-68 | |
| | | [illegible] 42 | 10-15-68 | |
| | | SA 24 | 1-6-69 | |
| | | 7-A81-29 & 30 | 1-6-69 | |
| | | 7-A81-33 & 34 | 1-6-69 | |
| | | 7-A82-19 | 1-6-69 | |

CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

APPROVED

NEW YORK AUTHORITY

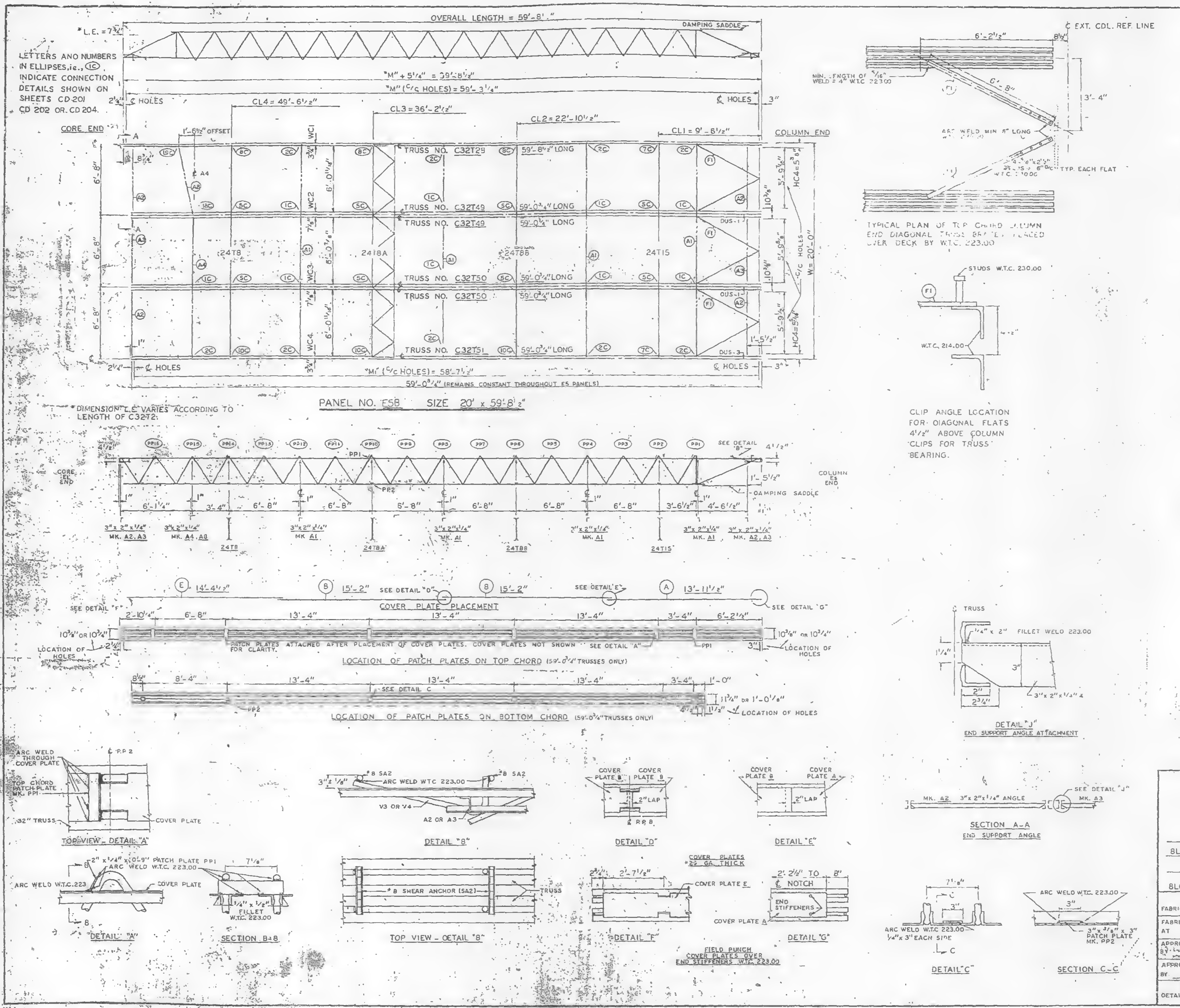
78 (NORTH)

PANEL ER3P - 20' x 59'-0¾"

BLDG. B FLOORS 78 (WEST)

[illegible] COMPANY

| | | | |
|---|---|---|---|
| FABRICATE AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7 A83 50 | PLATE |
| APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. | DATE | DRAWN BY [illegible]<br>DATE APRIL 2, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M.CHURA<br>DATE APRIL 2, 1969 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO.<br>DETAILED BY [illegible] WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP ER3P |

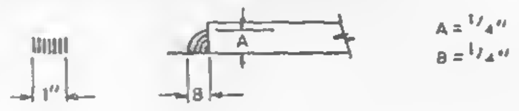


OVERALL LENGTH = 59'-8"
L.E. = 7 1/2"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.
"M" + 5 1/4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-3 1/4"
℄ HOLES
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
1'-6 1/2" OFFSET
WC1
WC2
WC3
WC4
TRUSS NO. C32T28
59'-8 1/2" LONG
TRUSS NO. C32T49
59'-0 3/4" LONG
TRUSS NO. C32T50
TRUSS NO. C32T51
24T8
24T8A
24T8B
24T15
DUS-1
DUS-3
HC4 = 5 3/8"
C/C HOLES
W = 20'-0"
6'-8"
"M1" (C/C HOLES) = 58'-7 1/2"
59'-0 3/4" (REMAINS CONSTANT THROUGHOUT E5 PANELS)
PANEL NO. E58 SIZE 20' x 59'-8 1/2"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
CORE END
COLUMN END
SEE DETAIL "B"
DAMPING SADDLE
3" x 2" x 1/4" MK. A2, A3
3" x 2" x 1/4" MK. A4, A8
3" x 2" x 1/4" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
14'-4 1/2"
15'-2"
13'-11 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)
SEE DETAIL C
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)
6'-2 1/2"
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN. 8" LONG
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
℄ TRUSS
1/4" x 2" FILLET WELD 223.00
3" x 2" x 1/4" 4
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3" x 2" x 1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
2" x 1/4" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
DETAIL "A"
1/4" x 1/2" FILLET W.T.C. 223.00
SECTION B-B
#8 SA2
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "D"
DETAIL "E"
COVER PLATES #29 GA. THICK
COVER PLATE E
COVER PLATE A
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2'-2 1/4" TO 8" ℄ NOTCH
END STIFFENERS
DETAIL "G"
ARC WELD W.T.C. 223.00 1/4" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x 3/8" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T28 | 1 | C32T28 - 59'-8 1/2" | ST 2028 |
| | T49 | 2 | C32T49 - 59'-0 3/4" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0 3/4" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0 3/4" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| | A4 | 1 | 3" x 2" x 1/4" x [illegible] 3" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-8 5/8" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | 1 1/2" x 5/8" x 6'-8" | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" ϕ x 1'-3" | ST. 400 |
| | CB3 | 6 | 1 5/8" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2" x 3/8" x 0 1/2" | ST 400 |
| | P2 | 1 | 4 1/2" x .39" x 0'-8" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-5" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

| | |
|---|---|
| 7-A92-3 & 10 | 7-22-68 |
| 7-A93-73 | 11-25-68 |
| 7-A94-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-3 | 7-22-68 |
| 7-A81-44, 45 & 46 | 11-25-68 |

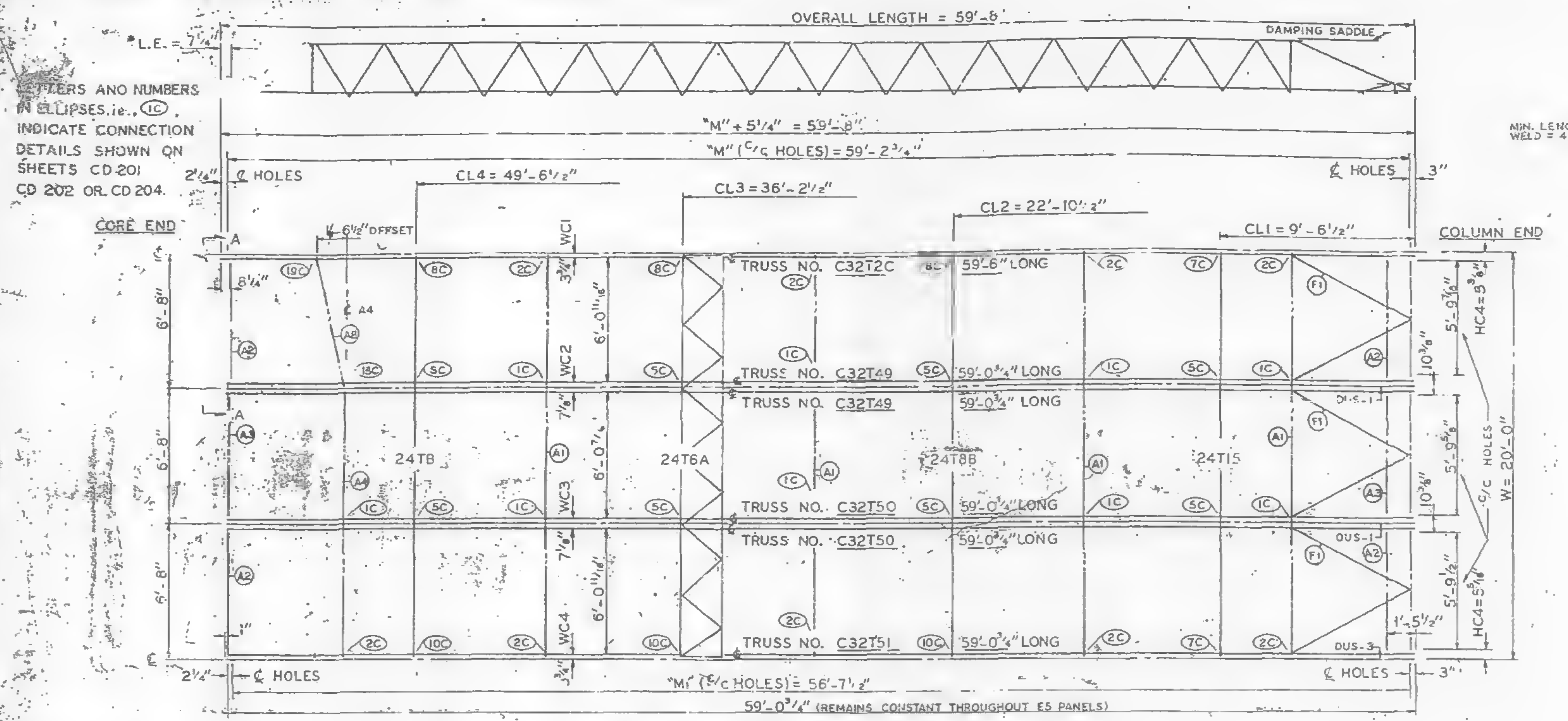
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)
PANEL E58 - 20' x 59'-8 1/2"
BLDG. B FLOORS 83 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

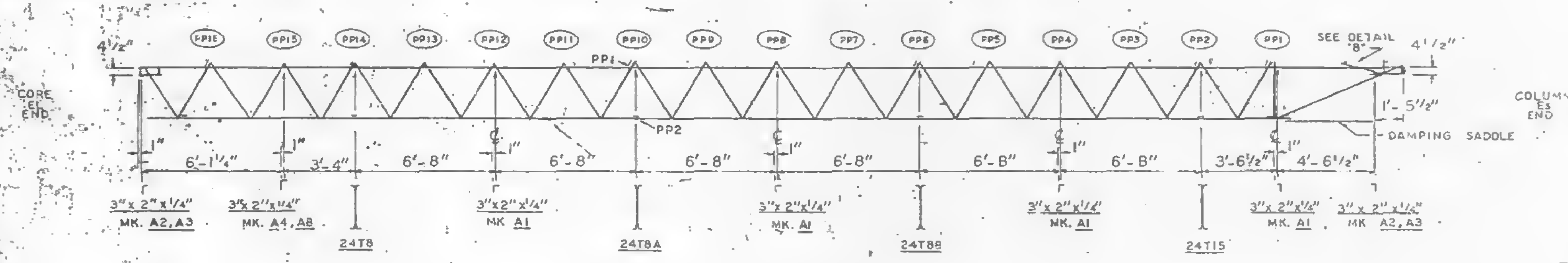
| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-A83-73 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 7/31/69 | DRAWN BY: adc. DATE JAN. 15, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR DATE | CHECKED BY: T.M. CHURA DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E58 |

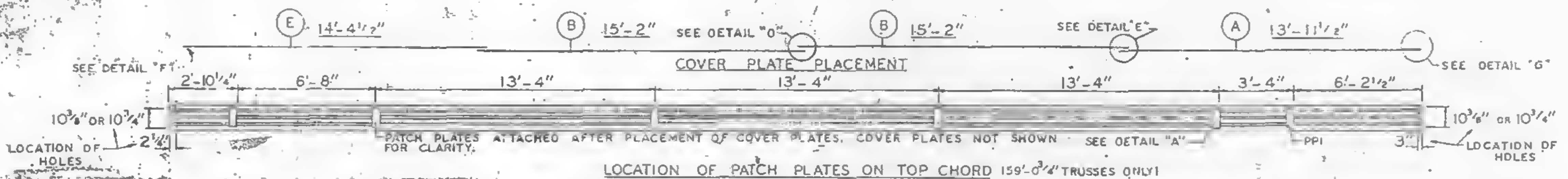
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.



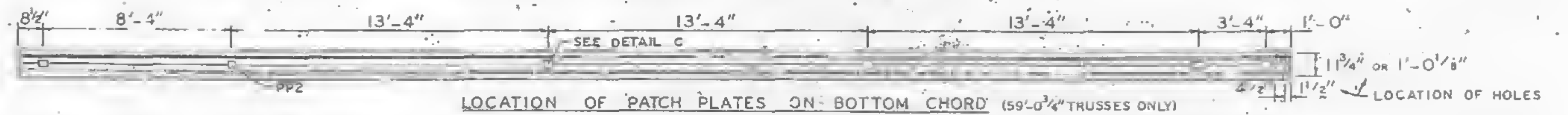
PANEL NO. E5C SIZE 20' x 59'-8"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2C.

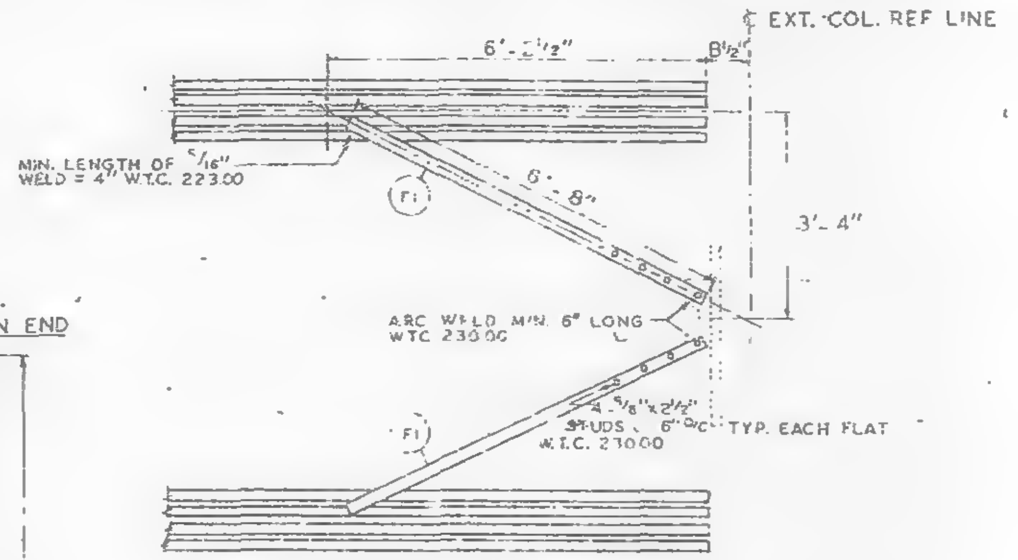




LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)

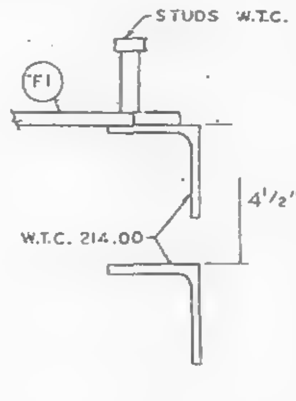


LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)



EXT. COL. REF LINE
6'-5½"
8⅛"
MIN. LENGTH OF ⅜" WELD = 4" W.T.C. 223.00
F1
6'-8"
3'-4"
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS 6" O.C. W.T.C. 230.00
TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

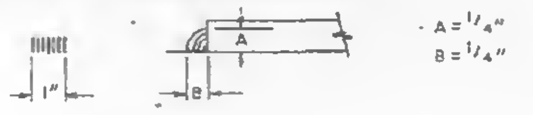


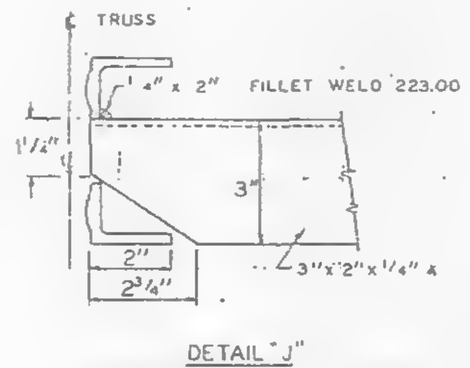
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T49 | 2 | C32T49 - 59'-0¾" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0¾" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0¾" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x [illegible] 3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x 6'-3⅝" | ST 405 |
| DIAGONAL FLATS | F1 | 6 | 1½" x ⅝" x 6'-8" | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-0" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-5⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-5⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ɸ x 1'-3" | ST 400 |
| | CB2 | 6 | 1³⁄₁₆" ɸ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ɸ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x [illegible] | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x [illegible]" x 0'-3" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



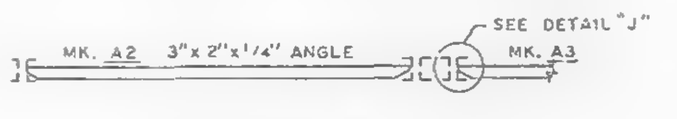


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

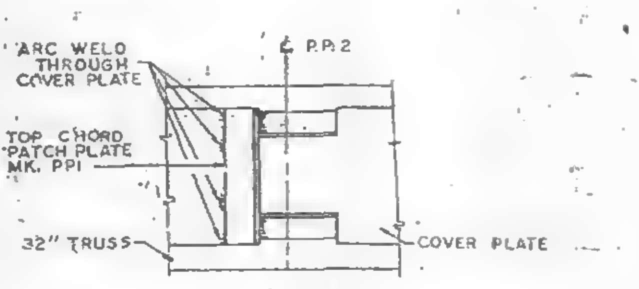
| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

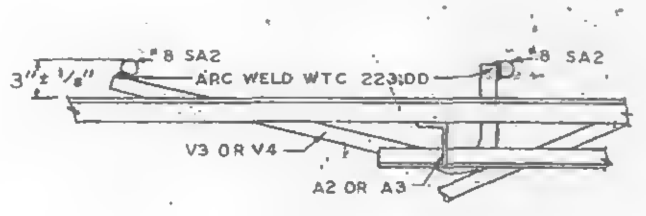
| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-73 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-88 |
| 7-AB4-42 | 10-15-88 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44, 45 & 46 | 11-25-68 |



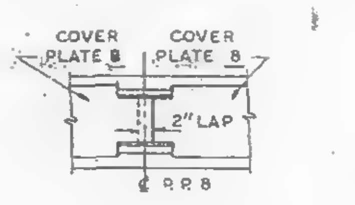
SECTION A-A
END SUPPORT ANGLE



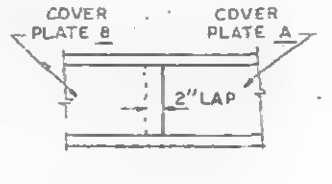
TOP VIEW - DETAIL "A"



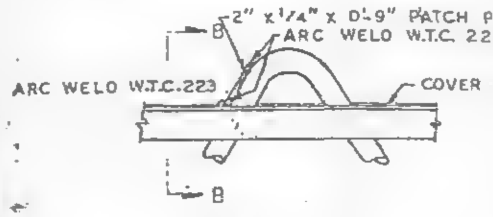
DETAIL "B"



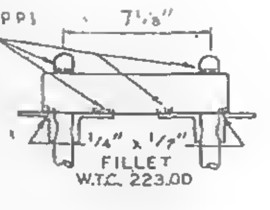
DETAIL "D"



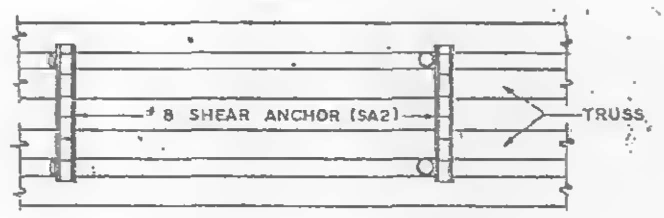
DETAIL "E"



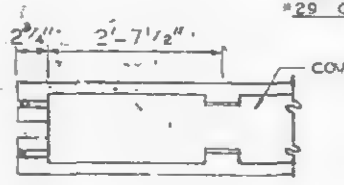
DETAIL "A"



SECTION B-B

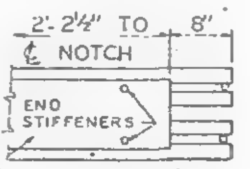


TOP VIEW - DETAIL "B"



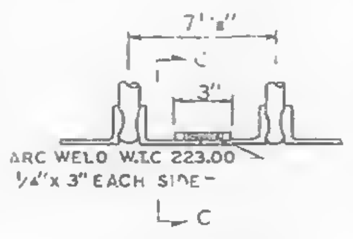
DETAIL "F"

COVER PLATES #29 GA. THICK

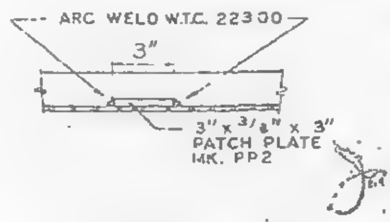


DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C"



SECTION C-C

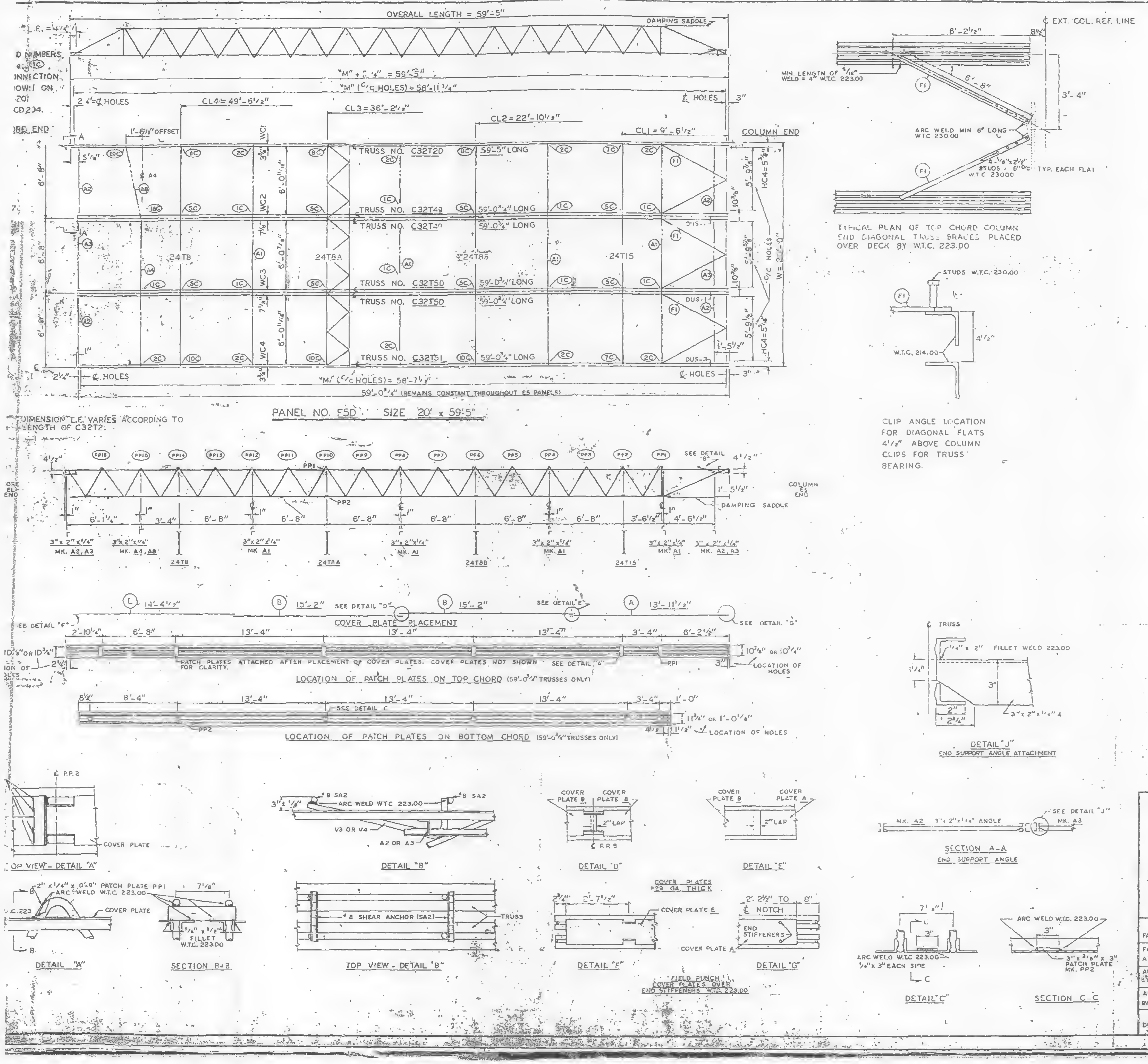
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 49 (SOUTH)
PANEL E5C - 20' x 59'-8"
BLDG. B FLOORS 49 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-AB3.73 | PLATE |
| APPROVED FOR FABRICATION [illegible] FOR P.O.N.Y.A. DATE 7/24/69 | DRAWN BY gdc DATE JAN 15, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR DATE | CHECKED BY: T.M. CHURA DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E5C |

LACLEDE STEEL CO.


OVERALL LENGTH = 59'-5"
DAMPING SADDLE
"M" + 5 1/4" = 59'-5"
"M" (C/C HOLES) = 58'-11 3/4"
CL4 = 49'-8 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T2D 59'-5" LONG
TRUSS NO. C32T49 59'-0 3/4" LONG
TRUSS NO. C32T50 59'-0 3/4" LONG
TRUSS NO. C32T51 59'-0 3/4" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
"M" (C/C HOLES) = 58'-7 1/2"
59'-0 3/4" (REMAINS CONSTANT THROUGHOUT E5 PANELS)
HC4 = 5 3/4"
W = 20'-0"
PANEL NO. E5D SIZE 20' x 59'-5"
DIMENSION "L.E." VARIES ACCORDING TO LENGTH OF C32T2.
SEE DETAIL "B"
DAMPING SADDLE
COLUMN E5 END
3" x 2" x 1/4" MK. A2, A3
3" x 2" x 1/4" MK. A4, A8
3" x 2" x 1/4" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)
LOCATION OF HOLES
SEE DETAIL C
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)
6'-2 1/2"
8 3/4"
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 3/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS 6" O/C W.T.C. 230.00
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
℄ TRUSS
1/4" x 2" FILLET WELD 223.00
3" x 2" x 1/4" ∠
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3" x 2" x 1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
℄ P.P.2
COVER PLATE
TOP VIEW - DETAIL "A"
#8 SA2
ARC WELD W.T.C. 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
2" x 1/4" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
COVER PLATE
DETAIL "A"
1/4" x 1 1/2" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #20 GA. THICK
COVER PLATE E
COVER PLATE A
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2'-2 1/2" TO 8"
℄ NOTCH
END STIFFENERS
DETAIL "G"
ARC WELD W.T.C. 223.00
1/4" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x 3/8" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | |
| FLOOR TRUSSES | T2D | 1 | C32T20 - 59'-5" | ST 202D |
| | T49 | 2 | C32T49 - 59'-0 3/4" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0 3/4" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0 3/4" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-1 [illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-1 [illegible] | ST 403 |
| | [illegible] | 1 | [illegible] | [illegible] |
| | A8 | [illegible] | 3" x 2" x [illegible] | ST 40[illegible] |
| DIAGONAL FLATS | | [illegible] | [illegible] | [illegible] |
| COVER PLATES | [illegible] | 3 | [illegible] | ST 303 |
| | [illegible] | 8 | [illegible] | ST 30[illegible] |
| | [illegible] | 3 | [illegible] | ST 303 |
| ANGLE CLIPS | C1 | [illegible] | 2" x 1 1/2" x 1/4" x 0'-8" | ST 400 |
| | C2 | 4 | [illegible] | ST 400 |
| DAMPING SADDLE | DS-[illegible] | 2 | [illegible] | ST 2[illegible] |
| | DS-3 | [illegible] | [illegible] | ST 293 |
| CONNECTION BAR | CB1 | 1 | [illegible] | ST 400 |
| | CB2 | 6 | [illegible] | ST 400 |
| | CB3 | 6 | [illegible] | ST 400 |
| CONNECTION PLATES | [illegible] | 5 | [illegible] | ST 400 |
| | [illegible] | 1 | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | F5 | 3 | [illegible] | ST 400 |
| | PF | 1 | [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible] | ST 4[illegible] |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

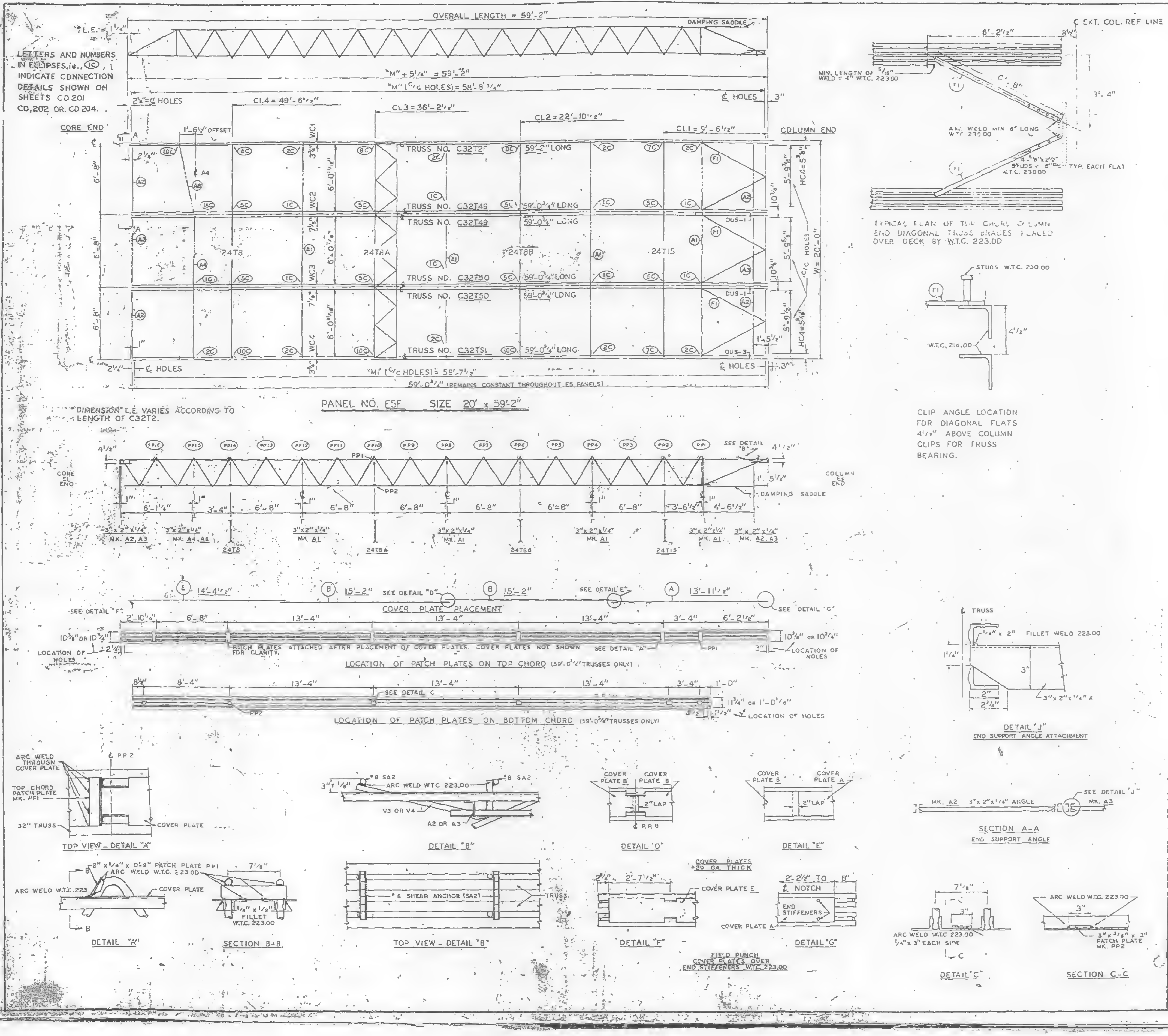
REF. DRWGS.

| | |
|---|---|
| 7-A82-3 & 10 | 7-22-68 |
| 7-A83-73 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-3 | 7-22-68 |
| 7-A81-44, 45 & 46 | 11-25-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 81 & 82 (NORTH)
PANEL E5D - 20' x 59'-5"
BLDG. B FLOORS 81 & 82 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83 73
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.
DATE [illegible]
DRAWN BY: g.d.c.
DATE JAN. 15, 1969
APPROVED FOR FABRICATION BY: FOR FABRICATOR
DATE
CHECKED BY: T.M. CHURA
DATE JAN. 15, 1969
IN CHARGE OF PROD. DEV. [illegible]
DETAILED BY: A. CARL WEBER
FABRICATION CONT. NO. W.T.C. - 221
SHEET NO. FP E5D

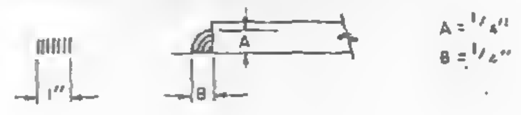


OVERALL LENGTH = 59'-2"
*L.E.= 1¼"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.
"M" + 5¼" = 59'-2"
"M" (C/C HOLES) = 58'-8¾"
2¼" ℄ HOLES
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
℄ HOLES
CORE END
COLUMN END
1'-6½" OFFSET
TRUSS NO. C32T2F 59'-2" LONG
TRUSS NO. C32T49 59'-0¾" LONG
TRUSS NO. C32T49 59'-0¾" LONG
TRUSS NO. C32T50 59'-0¾" LONG
TRUSS NO. C32T50 59'-0¾" LONG
TRUSS NO. C32T51 59'-0¾" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
6'-8"
6'-0⅞"
HC4 = 5⅜"
C/C HOLES
W = 20'-0"
DUS-1
DUS-3
℄ HOLES
"M" (C/C HOLES) = 58'-7½"
59'-0¾" (REMAINS CONSTANT THROUGHOUT E5 PANELS)
PANEL NO. E5F SIZE 20' x 59'-2"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
6'-2½"
8¾"
℄ EXT. COL. REF LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
TYP. EACH FLAT
3'-4"
TYPICAL PLAN OF TOP CHORD @ COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4½"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
PP1
PP2
6'-1¼"
3'-4"
6'-8"
3'-6½"
4'-6½"
1'-5½"
3" x 2" x ¼" MK. A2, A3
3" x 2" x ¼" MK. A4, A8
3" x 2" x ¼" MK. A1
24T8
24T8A
24T8B
24T15
14'-4½"
15'-2"
13'-11½"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
COVER PLATE PLACEMENT
2'-10¼"
6'-8"
13'-4"
3'-4"
6'-2½"
10⅜" OR 10¾"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)
8¼"
8'-4"
1'-0"
SEE DETAIL C
11¾" OR 1'-0⅛"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)
TRUSS
¼" x 2" FILLET WELD 223.00
3" x 2" x ¼" ∠
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
#8 SA2
ARC WELD WTC 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE A
DETAIL "E"
MK. A2 3" x 2" x ¼" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A END SUPPORT ANGLE
2" x ¼" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
COVER PLATE
DETAIL "A"
¼" x ½" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TOP VIEW - DETAIL "B"
COVER PLATES #30 GA. THICK
COVER PLATE E
COVER PLATE A
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2'-2½" TO 8"
℄ NOTCH
END STIFFENERS
DETAIL "G"
7⅛"
3"
ARC WELD W.T.C 223.00 ¼" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x ⅜" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | |
| FLOOR TRUSSES | T2F | 1 | C32T2F - 59'-2" | ST 202F |
| | T49 | 2 | C32T49 - 59'-0¾" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0¾" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0¾" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 18'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11¾" | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x 19'-3" | ST 405 |
| | A8 | 1 | 3" x 2" x ¼" x 8'-5⅜" | ST 405 |
| DIAGONAL FLATS | [illegible] | 6 | [illegible] | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11½" | ST 303 |
| | B | 6 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1⅜" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 7½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x .39" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ⅜" x 0'-3" | ST 400 |

(1) ALL ARC-WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



A = ¼"
B = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

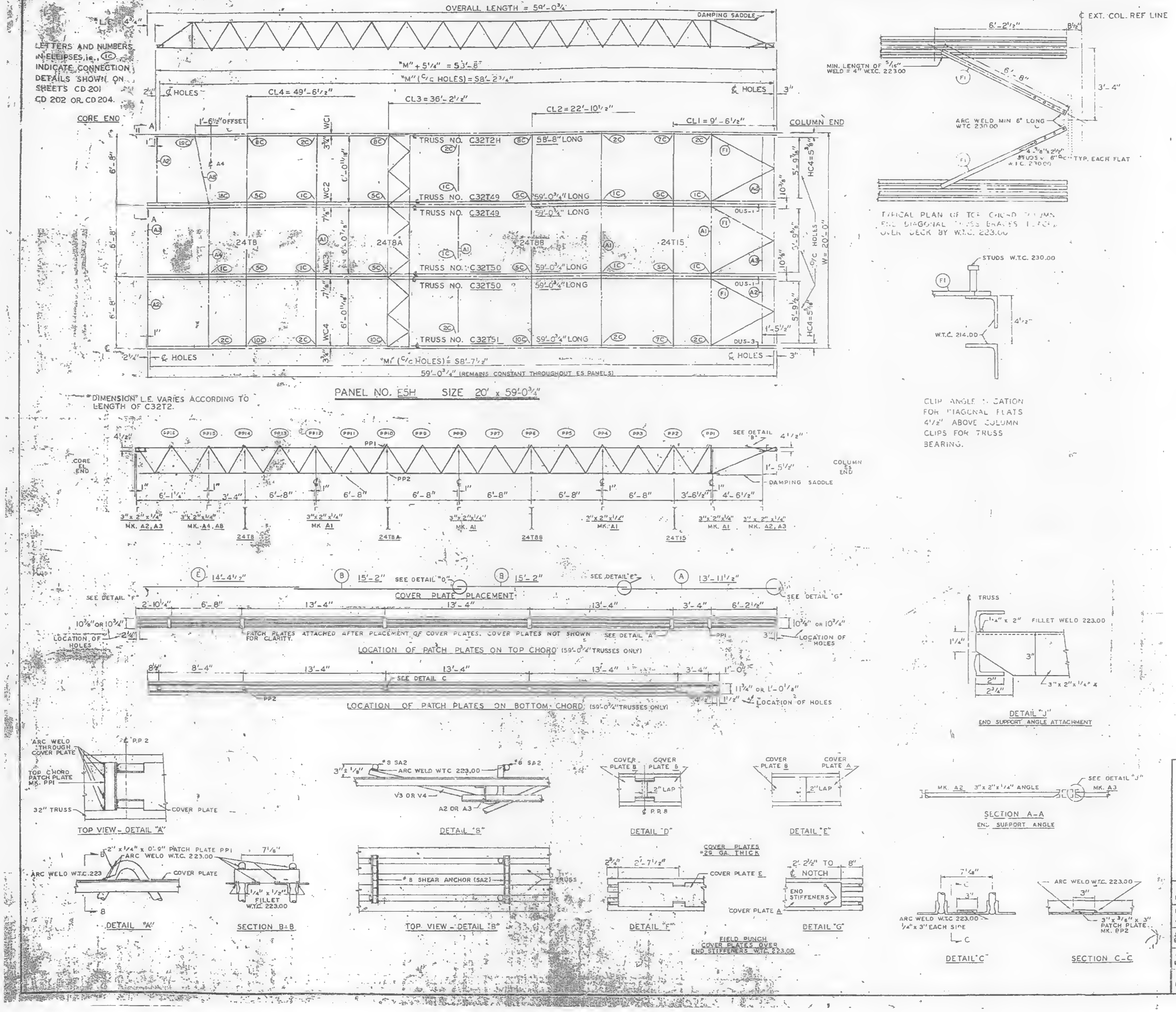
| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-73 | 11-25-68 |
| 7-AB4-3 | 10-15-88 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44, 45 & 46 | 11-25-88 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47 & 48 (SOUTH)
PANEL E5F - 20' x 59'-2"
BLDG. B FLOORS 47 & 48 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

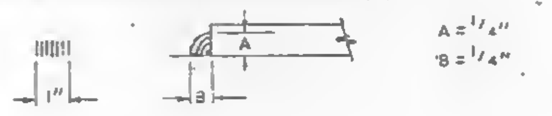
| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3.73 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. | DATE 7/31/69 | DRAWN BY: gdc<br>DATE JAN 15, 1969 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA<br>DATE JAN 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E5F |


LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.
OVERALL LENGTH = 59'-0¾"
DAMPING SADDLE
"M" + 5¼" = 53'-8"
"M" (C/C HOLES) = 58'-2¾"
CORE END
COLUMN END
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T2H 58'-8" LONG
TRUSS NO. C32T49 59'-0¾" LONG
TRUSS NO. C32T50 59'-0¾" LONG
TRUSS NO. C32T51 59'-0¾" LONG
24T8
24T8A
24T8B
24T15
W = 20'-0"
"M1" (C/C HOLES) = 58'-7½"
59'-0¾" (REMAINS CONSTANT THROUGHOUT E5 PANELS)
PANEL NO. E5H SIZE 20' x 59'-0¾"
"DIMENSION" L.E. VARIES ACCORDING TO LENGTH OF C32T2.
TYPICAL PLAN OF TOP CHORD COLUMNS FOR DIAGONAL TRUSS BRACES TO FORCE OVER DECK BY W.T.C. 223.00
C EXT. COL. REF LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
DAMPING SADDLE
3"x2"x¼" MK. A2, A3
3"x2"x¼" MK. A4, A8
3"x2"x¼" MK. A1
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)
LOCATION OF HOLES
SEE DETAIL C
TRUSS
FILLET WELD 223.00
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "D"
DETAIL "E"
SECTION A-A END SUPPORT ANGLE
MK. A2 3"x2"x¼" ANGLE
SEE DETAIL "J" MK. A3
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
DETAIL "C"
SECTION C-C
COVER PLATES 29 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
#8 SHEAR ANCHOR (SA2)
ARC WELD W.T.C. 223.00
2"x¼" x 0'-9" PATCH PLATE PP1
3"x3/8"x3" PATCH PLATE MK. PP2
END STIFFENERS

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T2H | 1 | C32T2H - 58'-8" | ST 202H |
| | T49 | 2 | C32T49 - 59'-0¾" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0¾" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0¾" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3"x2"x¼" ANGLE | A1 | 4 | 3"x2"x¼"x19'-11" | ST 403 |
| | A2 | 4 | 3"x2"x¼"x5'-[illegible] | ST 403 |
| | A3 | 2 | 3"x2"x¼"x5'-[illegible] | ST 403 |
| | A4 | 1 | 3"x2"x¼"x[illegible] | ST 403 |
| | A8 | [illegible] | 3"x2"x¼"x6'-[illegible] | ST 403 |
| DIAGONAL FLAT | [illegible] | [illegible] | [illegible] | [illegible] |
| COVER PLATE | A | 3 | 9"x.0135"x13'-11½" | ST 303 |
| | B | 6 | 9"x.0135"x15'-2" | ST 303 |
| | E | 3 | 9"x.0135"x14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2"x1½"x¼"x0'-8" | ST 400 |
| | C2 | 4 | 2½"x1½"x¼"x6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x3½"x⅜"x3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½"x3½"x⅜"x3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 15 | 1" ɸ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" ɸ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ɸ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½"x⅜"x[illegible] | ST 400 |
| | P2 | 1 | 4½"x.39"x0'-[illegible] | ST 400 |
| | P3 | 1 | 4½"x.39"x1'-0" | ST 400 |
| | P5 | 3 | 4½"x¼"x1'-6" | ST 400 |
| | P6 | 1 | 4½"x.39"x0'-[illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | [illegible] ɸ REBAR x 0'-[illegible] | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x¼"x0'-9" | ST 400 |
| | PP2 | 18 | 3"x⅜"x0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

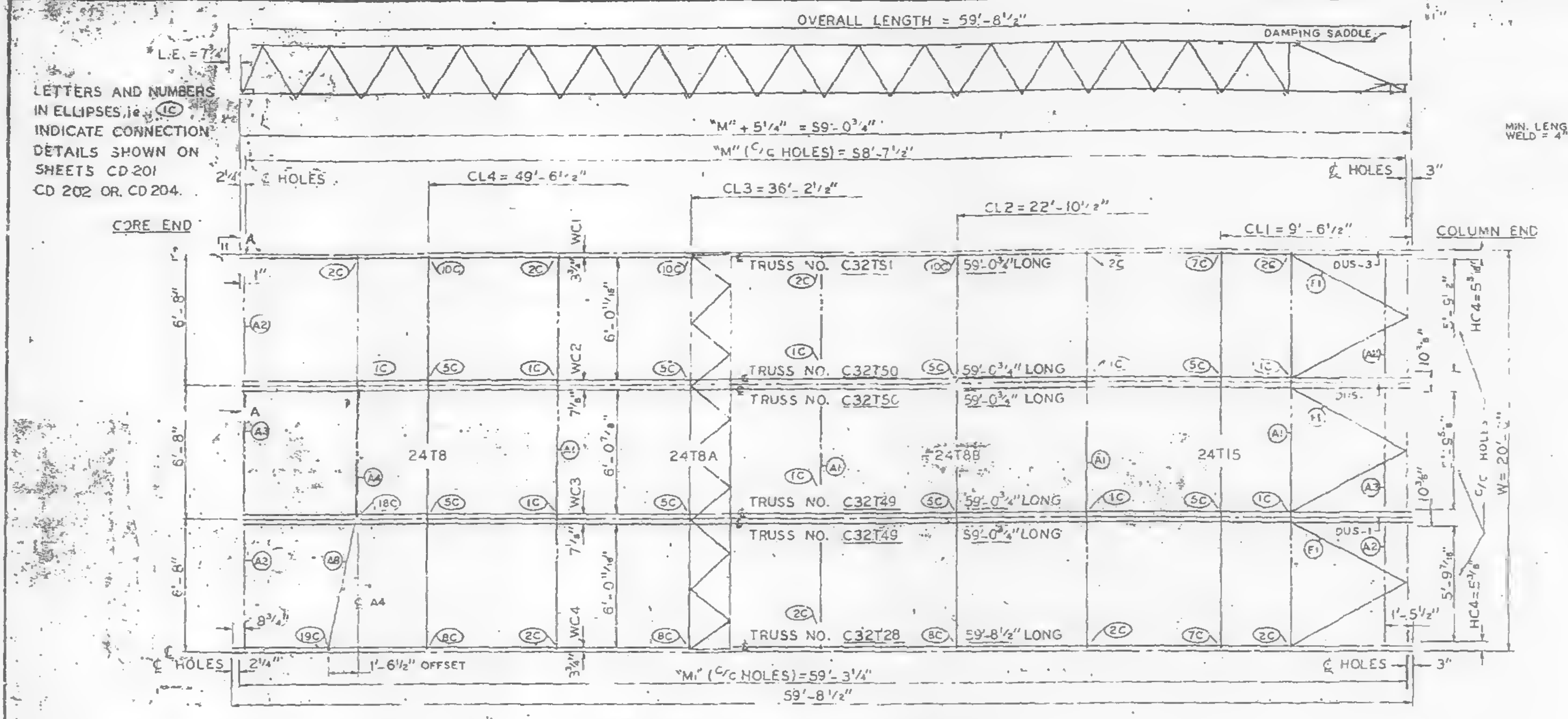
| REF. DRWGS. | |
|---|---|
| 7-A82-3 & 10 | 7-22-68 |
| 7-A83-73 | 11-25-68 |
| 7-A84-3 | 10-15-68 |
| 7-A84-15 & 16 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-3 | 7-22-68 |
| 7-A81-44, 45 & 46 | 11-25-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 79 & 80 (NORTH)
PANEL E5H - 20' x 59'-0¾"
BLDG. B FLOORS 79 & 80 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

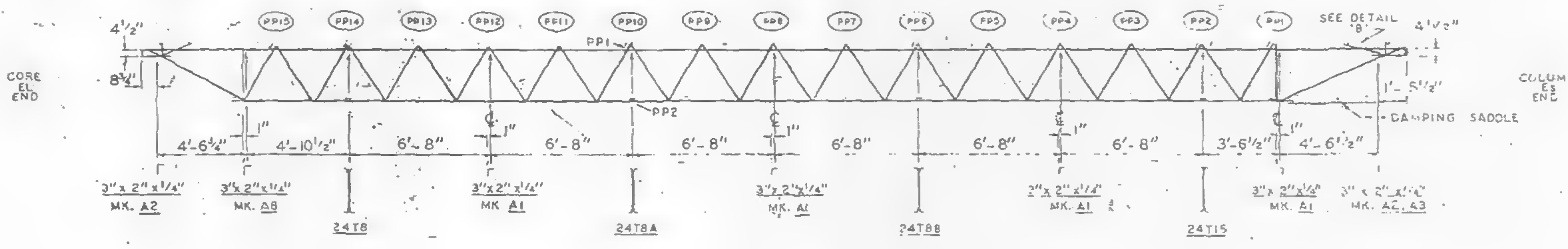
| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-A83-73 | PLATE |
| APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A. | DATE 7/31/69 | DRAWN BY: gdc<br>DATE JAN 15, 1969 | |
| APPROVED FOR FABRICATION BY: FOR FABRICATOR | DATE | CHECKED BY: T.M.CHURA<br>DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY [illegible] | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP. E5H |

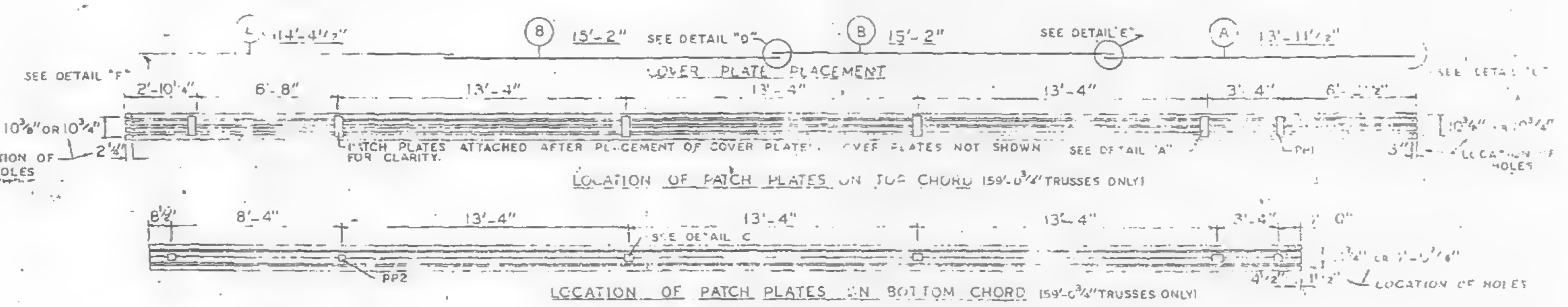


LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

PANEL NO. ER5B SIZE 20' x 59'-8½"

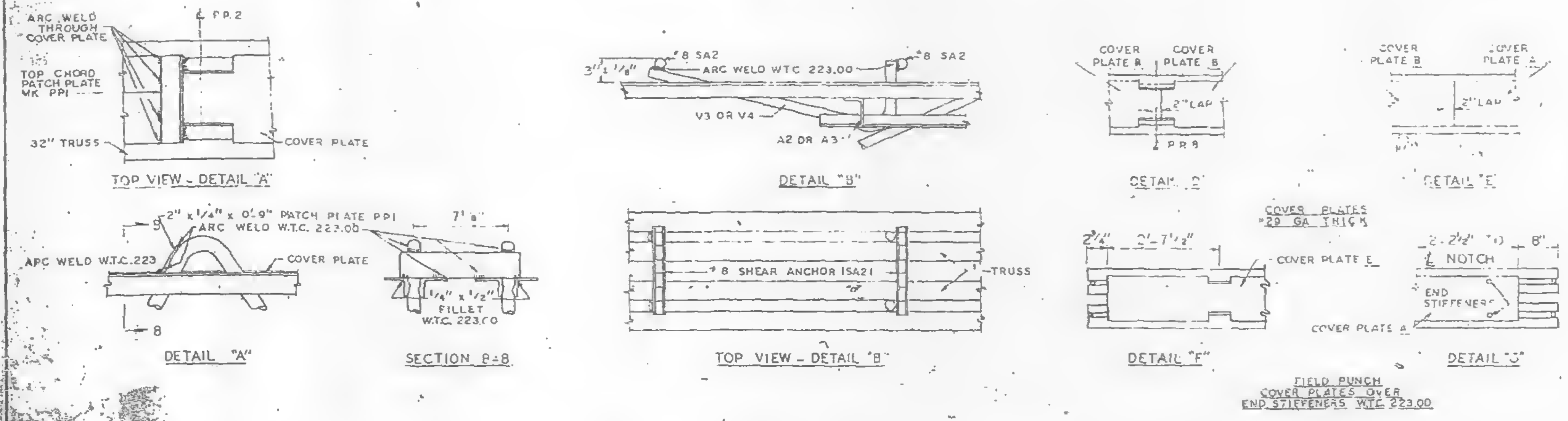
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.





LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)



TOP VIEW - DETAIL "A"

DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "A"

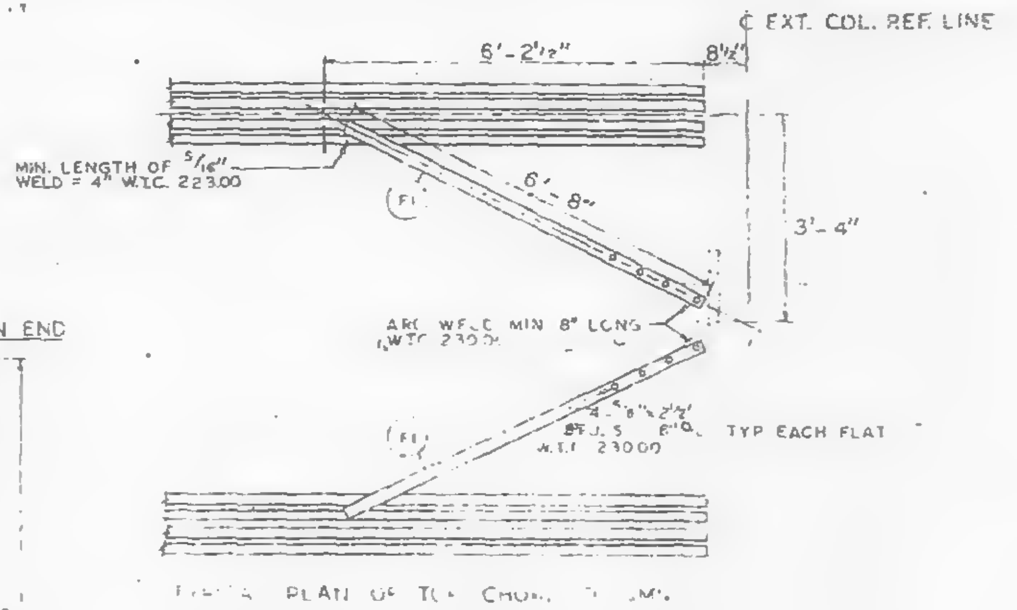
SECTION B-B

TOP VIEW - DETAIL "B"

DETAIL "F"

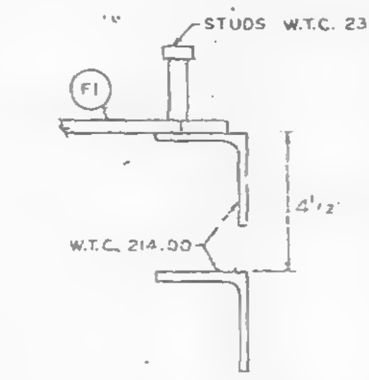
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "G"



℄ EXT. COL. REF. LINE
8'-2½"
8½"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
6'-8"
3'-4"
ARC WELD MIN 8" LONG W.T.C. 230.00
TYP EACH FLAT

PLAN OF TOP CHORD ... BRACES ... OVER DECK BY W.T.C. 223.00

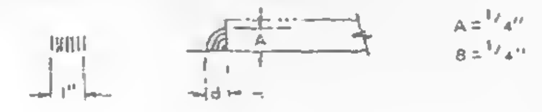


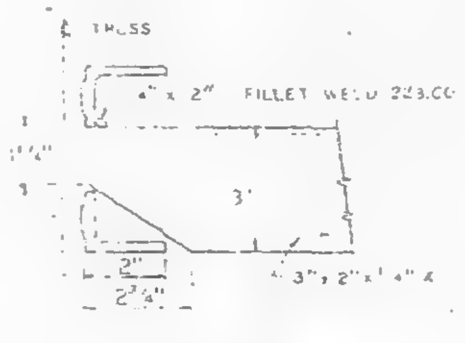
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| MATERIAL | MK | PC | SIZE | REF. DRWG. |
|---|---|---|---|---|
| FLOOR TRUSSES | T28 | 1 | C32T28 - 59'-8½" | ST 2028 |
| | T49 | 2 | C32T49 - 59'-0¾" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0¾" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0¾" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | [illegible] x 19'-11" | ST 403 |
| | A2 | 4 | [illegible] x 5'-1⅝" | ST 403 |
| | A3 | 3 | [illegible] x 5'-1⅞" | ST 403 |
| | [illegible] | 1 | [illegible] | ST 403 |
| | A8 | [illegible] | [illegible] | ST 403 |
| DIAGONAL FLATS | [illegible] | [illegible] | [illegible] | [illegible] |
| VERTICAL STIFFENERS | [illegible] | [illegible] | [illegible] 35" x 2'-11½" | ST 303 |
| | [illegible] | [illegible] | [illegible] | ST 303 |
| | [illegible] | [illegible] | [illegible] .035 x 4'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION EAR | CB1 | 1 | 1" ɸ x 1'-3" | ST 400 |
| | CB2 | 6 | 7/16" ɸ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅜" ɸ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | [illegible] | ST 400 |
| | P2 | 1 | [illegible] | ST 400 |
| | P3 | 1 | 4½" x .34" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/16" x 1'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



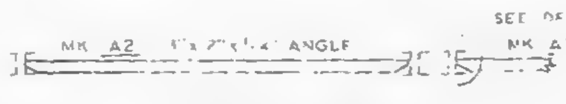


DETAIL "J"
(NO SUPPORT ANGLE ATTACHMENT)

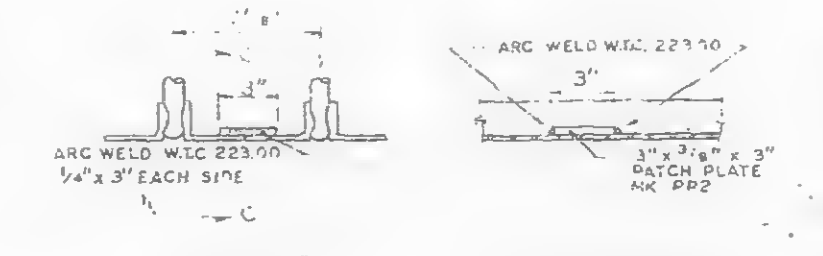
| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRAWINGS

| | |
|---|---|
| 7-AB2-1&7 | 7-22-68 |
| 7-AB-74 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15&16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| S4-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44,45&46 | 11-25-68 |



SECTION A-A
END SUPPORT ANGLE



ARC WELD W.T.C. 223.00 ¼" x 3" EACH SIDE
ARC WELD W.T.C. 223.00
3"
3" x 3/16" x 3" PATCH PLATE MK PP2

DETAIL "C"

SECTION C-C

FLOOR PANEL DETAILS

NEW YORK PORT AUTHORITY

BLDG. FLOORS 83 (NORTH)

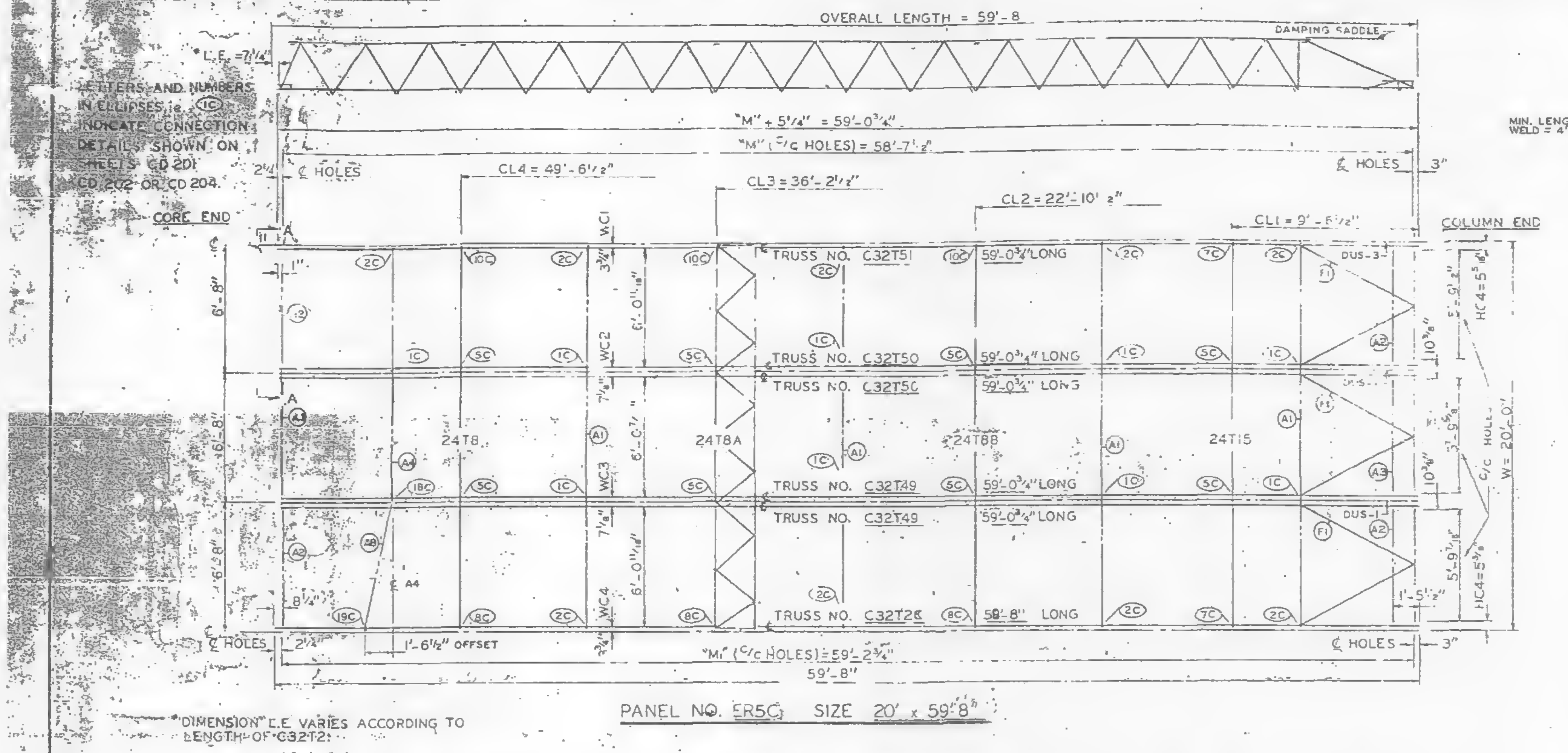
PANEL ER5B - 20' x 59'-8½"

BLDG. B FLOORS 83 (WEST)

FABRICATION BY STEEL COMPANY

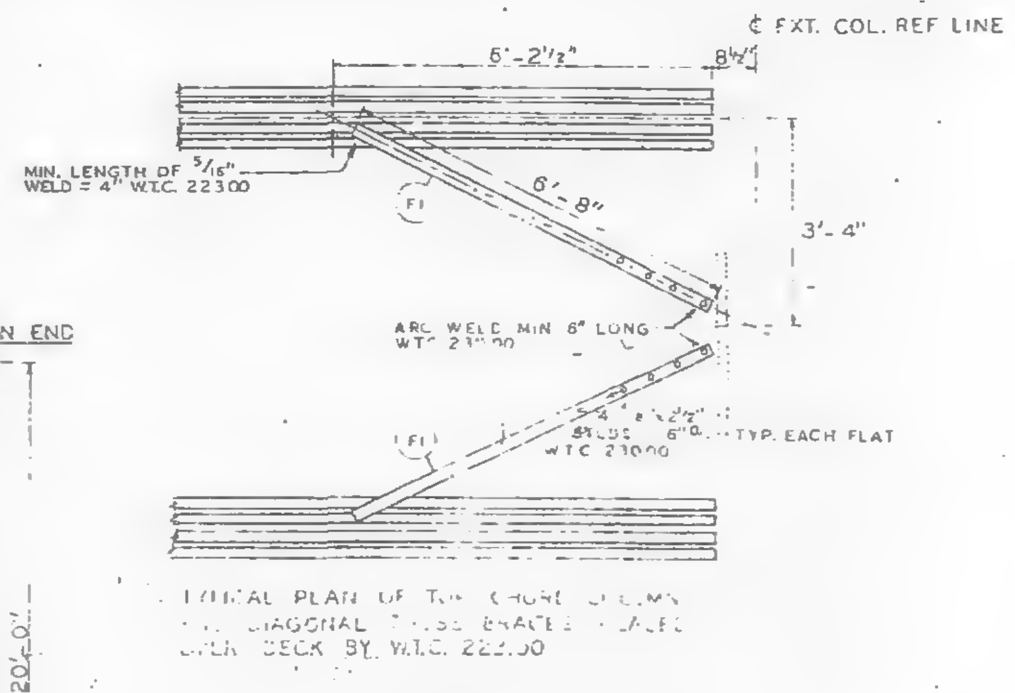
| | | | |
|---|---|---|---|
| FABRICATED AT MADISON | | DESIGN DRAWING NO. 7-AB3 74 | PLATE |
| APPROVED FOR FABRICATION BY FOR PONYA | DATE 7/31/69 | DRAWN BY DATE JAN 15, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T.M.CHURA DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY | | FABRICATION CONT. NO W.T.C. 221 | SHEET NO. FP ER5B |

LACLEDE STEEL CO.
LACLEDE STEEL CO.

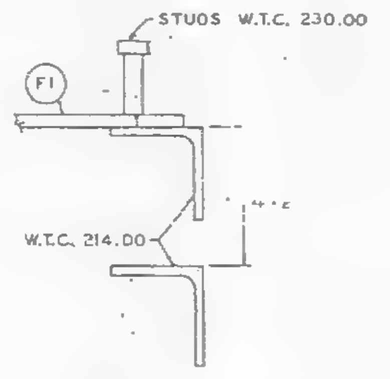


PANEL NO. ER5C SIZE 20' x 59'8"

"DIMENSION" L.E. VARIES ACCORDING TO LENGTH OF C32T2C


℄ EXT. COL. REF LINE
5'-2 1/2"
8 1/2"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 223.00
F1
TYP. EACH FLAT
W.T.C. 223.00

TYPICAL PLAN OF TOP CHORD COLUMN DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 222.00

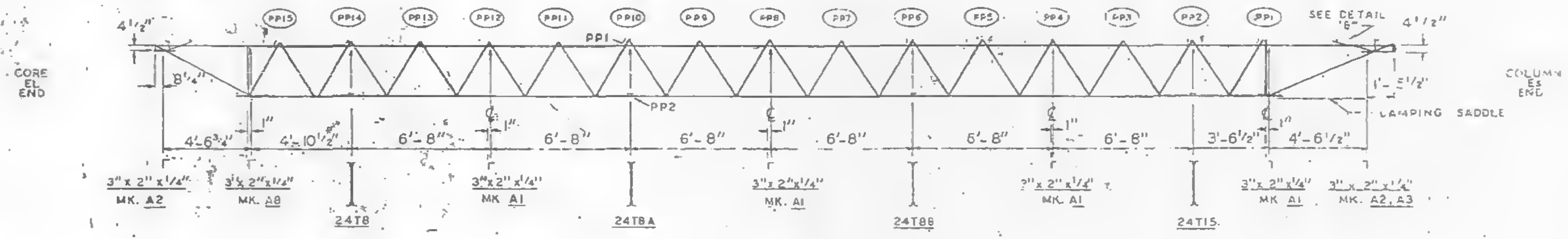


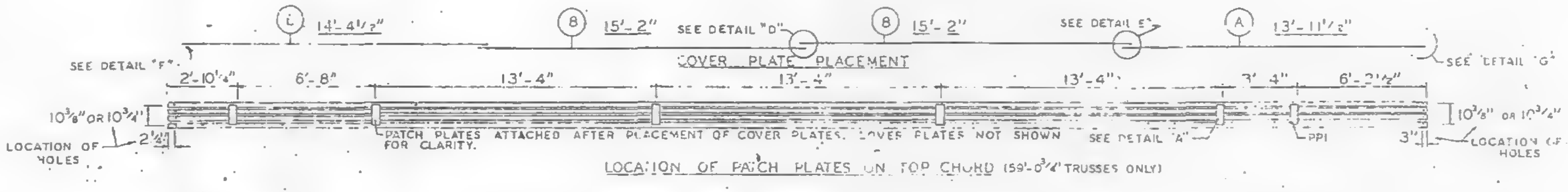
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | DRWG |
| FLOOR TRUSSES | T2C | 1 | C32T2C - 59'-8" | ST 202C |
| | T49 | 2 | C32T49 - 59'-0 3/4" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0 3/4" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0 3/4" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | [illegible] | ST 403 |
| | A3 | 2 | [illegible] | ST 403 |
| | A4 | 1 | [illegible] | [illegible] |
| | A8 | 1 | [illegible] | ST 40 |
| DIAGONAL FLATS | | 1 | [illegible] | [illegible] |
| | A | | [illegible] | ST [illegible] |
| | | | [illegible] | ST [illegible] |
| [illegible] | | | [illegible] | ST 303 |
| ANGLE CLIPS | C1 | | 2"x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 7/8" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | F1 | 5 | [illegible] | ST 400 |
| | F2 | 1 | [illegible] | ST 400 |
| | F3 | 1 | [illegible] | ST 400 |
| | F5 | 3 | 4 1/2" x 1/4" x 1'-8" | ST 400 |
| | P6 | 1 | [illegible] | ST 401 |
| #8 SHEAR CONNECTOR | SA2 | 6 | #8 SHEAR x 0'-2" | ST 4[illegible] |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 1'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

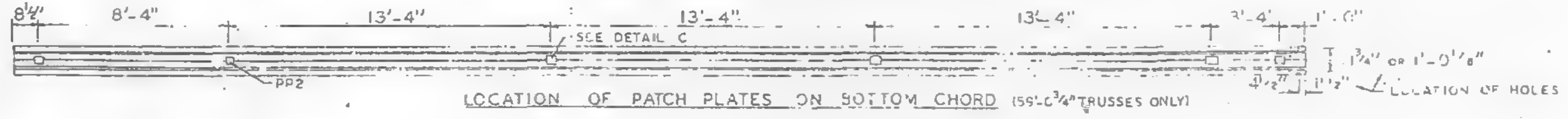
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

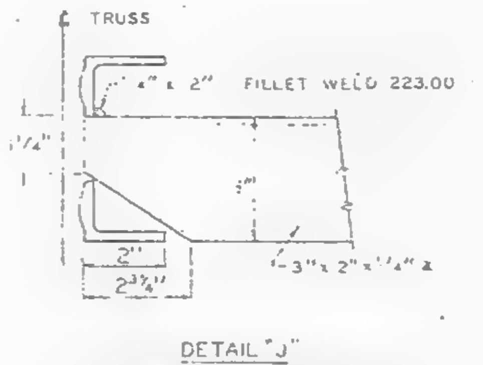




LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)



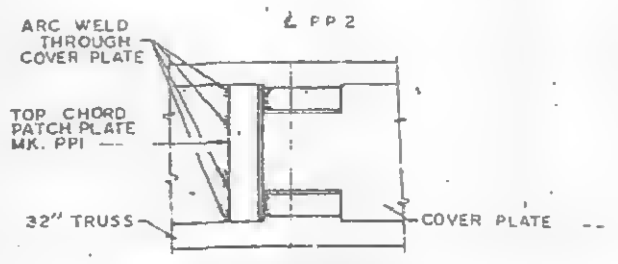
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)



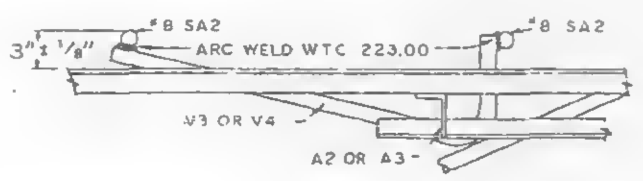
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

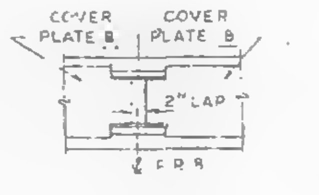
| REF. DRWGS | |
|---|---|
| 7-AB2-3 & 4 | 7-22-68 |
| 7-AB3-74 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44,45 & 46 | 11-25-68 |



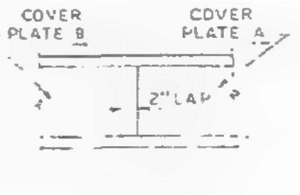
TOP VIEW - DETAIL "A"



DETAIL "B"

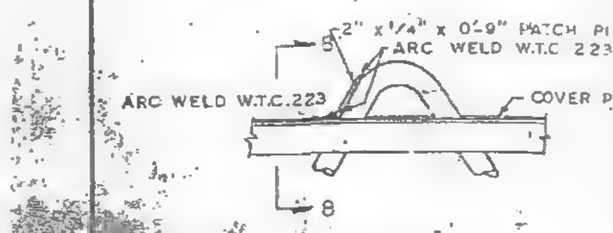


DETAIL "D"

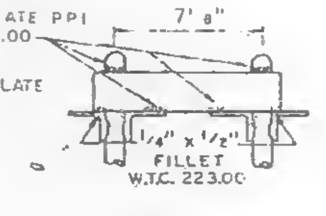


DETAIL "E"

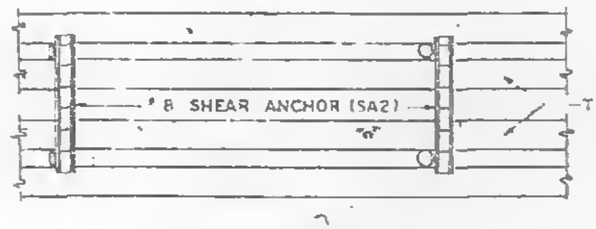
SECTION A-A
END SUPPORT ANGLE



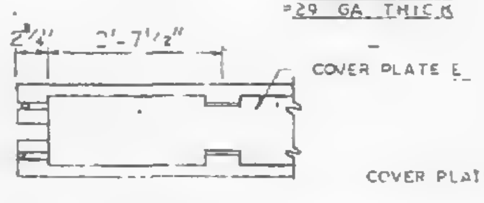
DETAIL "A"



SECTION B-B



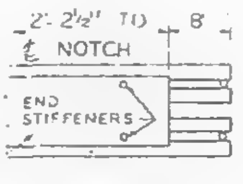
TOP VIEW - DETAIL "B"



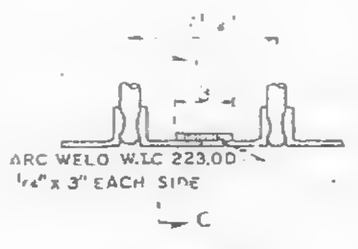
COVER PLATES #29 GA. THICK

DETAIL "F"

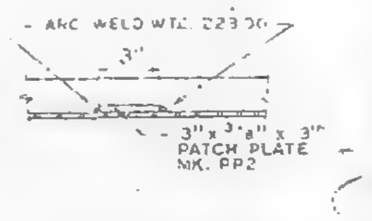
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "G"



DETAIL "C"



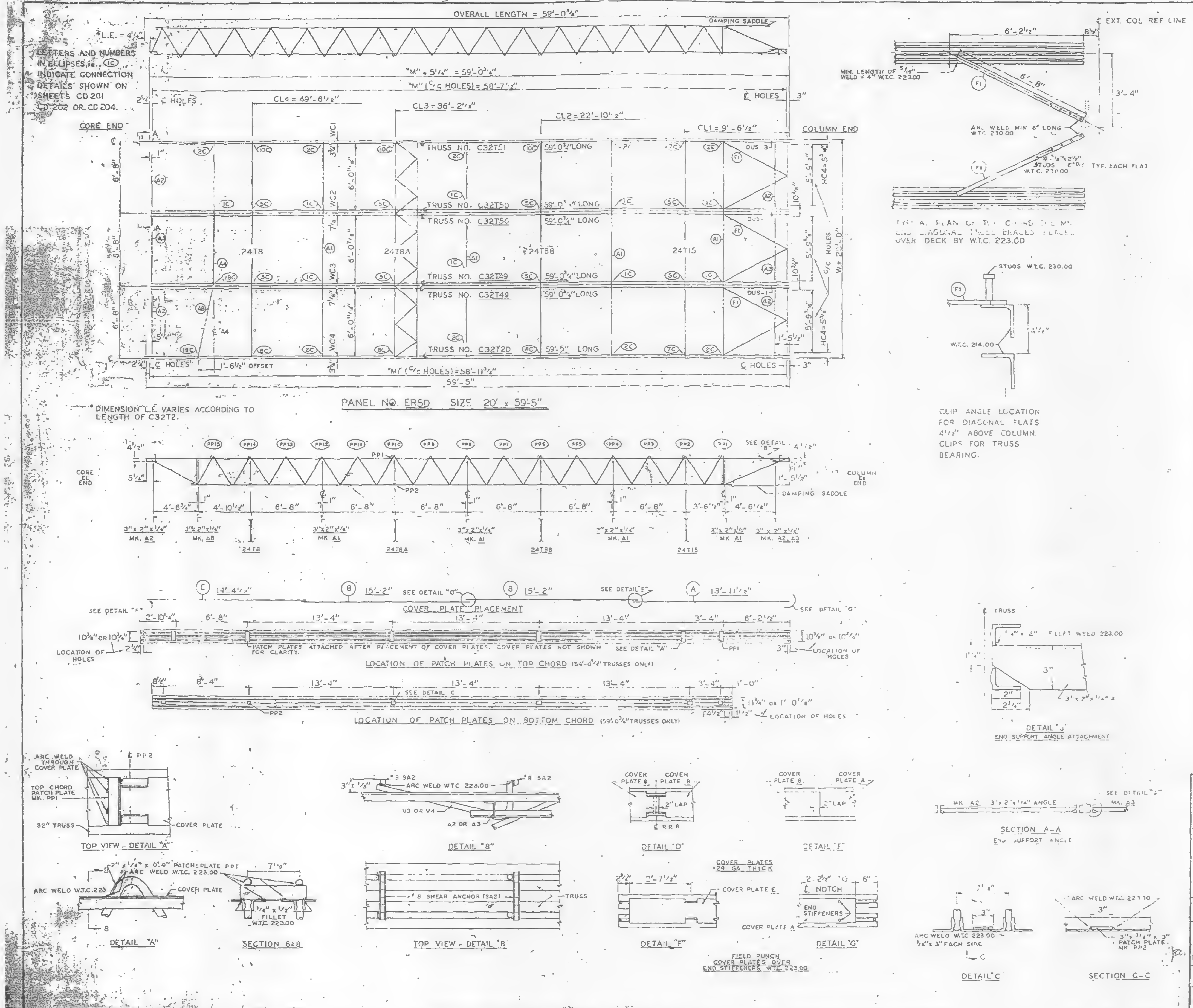
SECTION C-C

FLOOR PANEL DETAILS
FOR
[illegible]

BLDG. A FLOORS 49 & 79 (SOUTH)
PANEL ER5C - 20' x 59'-8"
BLDG. B FLOORS 49 & 79 (EAST)

| | | | |
|---|---|---|---|
| FABRICATION BY LACLEDE STEEL COMPANY | | | |
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7 AB3 74 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A | DATE 7/31/69 | DRAWN BY gdc DATE JAN. 15, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE | CHECKED BY T M CHURA DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP ER5C |

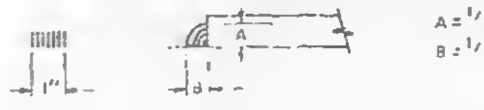
LACLEDE STEEL CO.



| REQUIRED MATERIAL FOR PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | |
| FLOOR TRUSSES | T20 | 1 | C32T20 - 59'-5" | ST 202D |
| | T49 | 2 | C32T49 - 59'-0¾" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0¾" | ST 250 |
| | T51 | | C32T51 - 59'-0¾" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | [illegible] | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | [illegible] | 1 | [illegible] | [illegible] |
| | A8 | [illegible] | [illegible] | ST 403 |
| DIAGONAL FLATS | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | A | [illegible] | [illegible] | [illegible] |
| | B | [illegible] | 6" x .075 x 5'-2" | ST 403 |
| | [illegible] | [illegible] | [illegible] x 4'-4½" | [illegible] |
| ANGLE CLIPS | C1 | 76 | 2" x 1½" x ¼" x 0'-6" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ɸ x 1'-3" | ST 400 |
| | CB2 | 5 | 1 3/16" ɸ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 [illegible] ɸ x 1'-5" | ST 400 |
| CONNECTION PLATES | F1 | 5 | [illegible] | ST 400 |
| | F2 | 1 | 4½" x [illegible] x [illegible] | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | F5 | 3 | 4½" x [illegible] x 1'-6" | ST 400 |
| | PC | 1 | 4½" x [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ¾" x 1'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DWGS.

| | |
|---|---|
| 7-AB2-1 & 2 | 7-22-68 |
| 7-AB3-74 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44, 45 & 46 | 11-25-68 |

FLOOR PANEL DETAILS

WORLD TRADE CENTER - N.Y.

FOR

THE PORT OF NEW YORK AUTHORITY

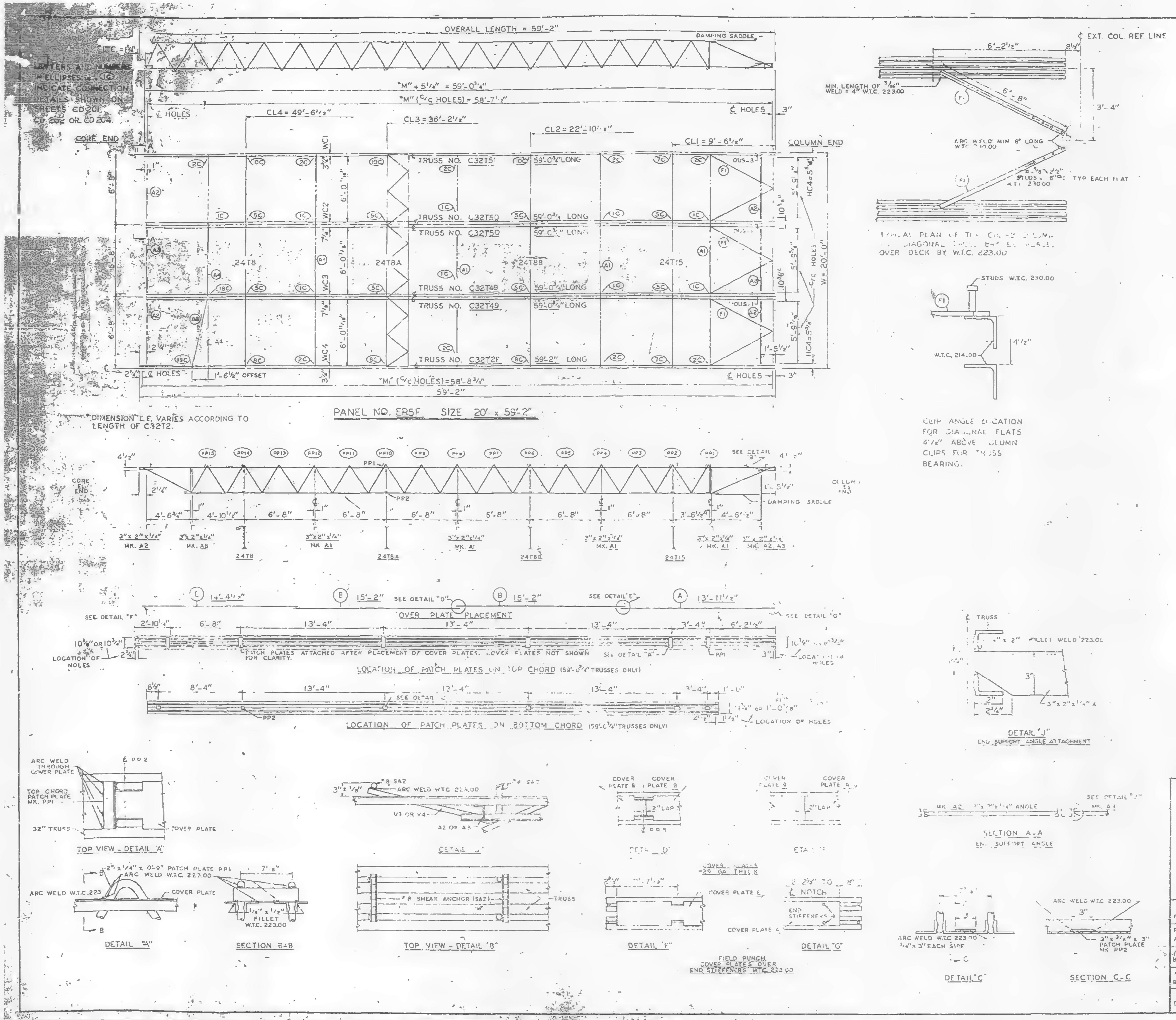
BLDG. A FLOORS 81 & 82 (NORTH)

PANEL ER5D - 20' x 59'-5"

BLDG. B FLOORS 81 & 82 (WEST)

FABRICATION BY AC[illegible] STEEL COMPANY

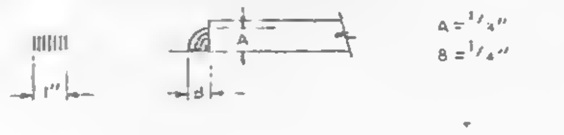
| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO 7 AB3 74 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 7/31/69 | DRAWN BY gdc<br>DATE JAN 15, 1969 | |
| APPROVED FOR FABRICATION BY FOR FABRICATOR DATE | CHECKED BY T.M. CHURA<br>DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP ER5D |


LETTERS AND NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD-201, CD-202 OR CD-204
OVERALL LENGTH = 59'-2"
DAMPING SADDLE
"M" + 5¼" = 59'-0¾"
"M" (C/C HOLES) = 58'-7½"
CORE END
COLUMN END
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T51 59'-0¾" LONG
TRUSS NO. C32T50 59'-0¾" LONG
TRUSS NO. C32T50 59'-0¾" LONG
TRUSS NO. C32T49 59'-0¾" LONG
TRUSS NO. C32T49 59'-0¾" LONG
TRUSS NO. C32T2F 59'-2" LONG
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
HC4 = 5¾"
W = 20'-0"
"M" (C/C HOLES) = 58'-8¾"
59'-2"
1'-6½" OFFSET
PANEL NO. ER5F SIZE 20' x 59'-2"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
SEE DETAIL "B"
DAMPING SADDLE
3"x 2"x¼" MK. A2
3"x 2"x¼" MK. A8
3"x 2"x¼" MK. A1
3"x 2"x¼" MK. A2, A3
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)
6'-2½"
EXT. COL. REF LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 220.00
STUDS 8" C/C TYP EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN DIAGONAL FLAT BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TRUSS
FILLET WELD 223.00
3"x 2"x¼"x 4
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
2"x¼"x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
ARC WELD W.T.C. 223
DETAIL "A"
¼"x ½" FILLET W.T.C. 223.00
SECTION B-B
#8 SA2
ARC WELD W.T.C. 223.00
DETAIL "E"
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATE B
COVER PLATE
2" LAP
DETAIL "D"
COVER PLATE
DETAIL "F"
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
NOTCH
END STIFFENERS
DETAIL "G"
MK. A2 3"x 2"x¼" ANGLE
SEE DETAIL "J"
SECTION A-A
END SUPPORT ANGLE
ARC WELD W.T.C. 223.00
¼"x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3"x 3/16"x 3" PATCH PLATE MK PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T2F | 1 | C32T2F - 59'-2" | ST 202F |
| | T49 | 2 | C32T49 - 59'-0¾" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0¾" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0¾" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | BT 208 |
| | T8A | 1 | 24T8A - 19'-11" | BT 208A |
| | T8B | 1 | 24T8B - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼"x 5'-11⅝" | ST 403 |
| | A3 | [illegible] | 3"x 2"x¼"x 5'-11⅝" | ST 403 |
| | [illegible] | 1 | [illegible] | ST 403 |
| | A8 | [illegible] | 3"x 2"x¼" [illegible] | ST 403 |
| DIAGONAL FLAT | [illegible] | [illegible] | [illegible] | [illegible] |
| COVER PLATES | A | [illegible] | [illegible]"x .0135"x 13'-11½" | ST 303 |
| | B | [illegible] | [illegible] 15'-2" | [illegible] |
| | [illegible] | [illegible] | [illegible] 4'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2"x 1½"x ¼"x 0'-6" | ST 400 |
| | C2 | 4 | 2½"x 1½"x ¼"x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x ⅜"x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½"x 3½"x ⅜"x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x [illegible] - 3" | ST 400 |
| | CB2 | 6 | 1 3/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½"x [illegible]"x [illegible] | ST 400 |
| | P2 | 1 | 4½"x [illegible]"x 0'-[illegible]" | ST 400 |
| | P3 | 1 | 4½"x .39"x 1'-0" | ST 400 |
| | P5 | 3 | 4½"x ¼"x 1'-8" | ST 400 |
| | P6 | 1 | 4½"x [illegible]"x 0'-[illegible]" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible]" | ST 4[illegible] |
| PATCH PLATES | PP1 | 18 | 2"x ¼"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/16"x 1'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

| | |
|---|---|
| 7-AB2-[illegible] & [illegible] | 7-22-68 |
| 7-AB3-74 | 11-25-68 |
| 7-AB4-[illegible] | 10-15-68 |
| 7-AB4-[illegible] & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44, 45 & 46 | 11-25-68 |

FLOOR PANEL DETAILS

FOR

NEW YORK

BLDG. [illegible] 47 & 48 (SOUTH)

PANEL ER5F 20' x 59'-2"

BLDG. 8 FLOORS 47 & 48 (EAST)

FABRICATION BY AZ[illegible] STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-AB3-74

PLATE

APPROVED FOR FABRICATION BY LSW FOR PONYA DATE 1/27/69

DRAWN BY ACW DATE JAN. 15, 1969

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

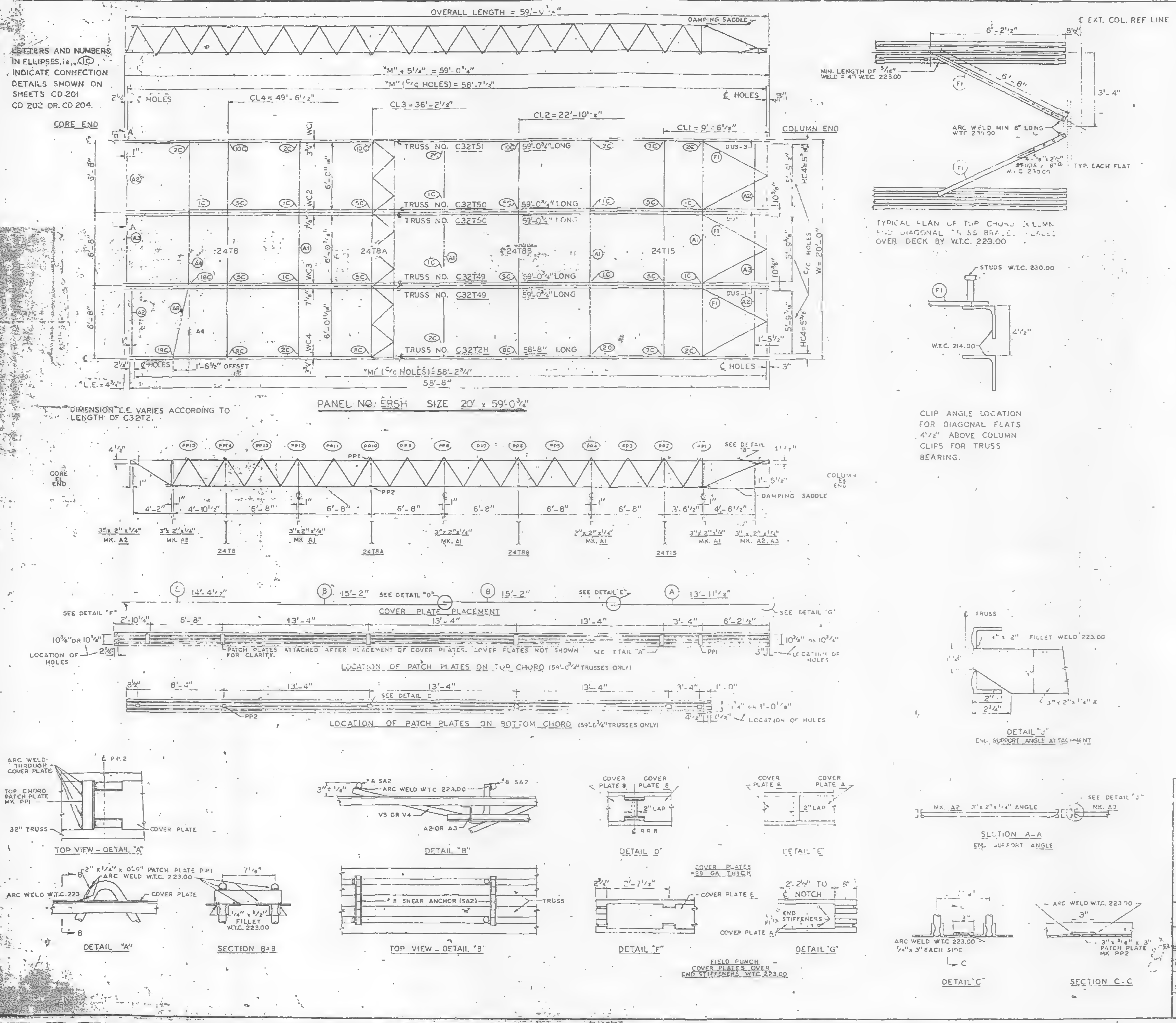
CHECKED BY T M CHURA DATE JAN. 15, 1969

IN CHARGE OF PROJ. DEV.

DETAILED BY: A CARL WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FP ER5F


LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD-201 CD 202 OR CD 204.
OVERALL LENGTH = 59'-0 3/4"
DAMPING SADDLE
"M" + 5 1/4" = 59'-0 3/4"
"M" (C/C HOLES) = 58'-7 1/2"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T51 59'-0 3/4" LONG
TRUSS NO. C32T50 59'-0 3/4" LONG
TRUSS NO. C32T49 59'-0 3/4" LONG
TRUSS NO. C32T2H 58'-8" LONG
24T8
24T8A
24T8B
24T15
W = 20'-0"
"M1" (C/C HOLES) = 58'-2 3/4"
58'-8"
L.E. = 4 3/4"
PANEL NO. ERSH SIZE 20' x 59'-0 3/4"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 223.00
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACE ... OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DAMPING SADDLE
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)
FILLET WELD 223.00
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION 8-8
DETAIL "B"
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES #29 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
SECTION A-A END SUPPORT ANGLE
DETAIL "C"
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T2H | 1 | C32T2H - 58'-8" | ST 202H |
| | T49 | 2 | C32T49 - 59'-0 3/4" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0 3/4" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0 3/4" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 19'-11" | 8T 208 |
| | T8A | 1 | 24T8A - 19'-11" | 8T 208A |
| | T8B | 1 | 24T8B - 19'-11" | 8T 208B |
| | T15 | 1 | 24T15 - 19'-11" | 8T 215 |
| 3"x 2"x 1/4" ANGLE | A1 | 4 | 3"x 2"x 1/4"x 18'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x 1/4"x 5'-1 7/16" | ST 403 |
| | A3 | 2 | 3"x 2"x 1/4"x 5'-1 3/4" | ST 403 |
| | A4 | 1 | [illegible] | ST 403 |
| | A8 | [illegible] | 3"x 2"x 1/4"x [illegible] | ST 403 |
| DIAGONAL FLATS | [illegible] | 1 | [illegible] | [illegible] |
| COVER PLATE | A | 3 | 9"x .0135"x 13'-11 1/2" | ST 303 |
| | B | 2 | 9"x .0135"x 15'-2" | ST 303 |
| | C | 1 | 9"x .0135"x 4'-4 1/2" | ST 303 |
| ANGLE CLIP | C1 | [illegible] | 2"x 1 1/2"x 1/4"x 0'-8" | ST 400 |
| | C2 | 4 | 2 1/2"x 1 1/2"x 1/4"x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 5/8" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3 1/2"x 3/8"x [illegible] | ST 400 |
| | P2 | 1 | 4 1/2"x [illegible] x 0'-9" | ST 400 |
| | P3 | 1 | 4 1/2"x [illegible] x 1'-0" | ST 400 |
| | P5 | 3 | 4 1/2"x 1/4"x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2"x [illegible] x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x 1/4"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x 3/8"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

| NO | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

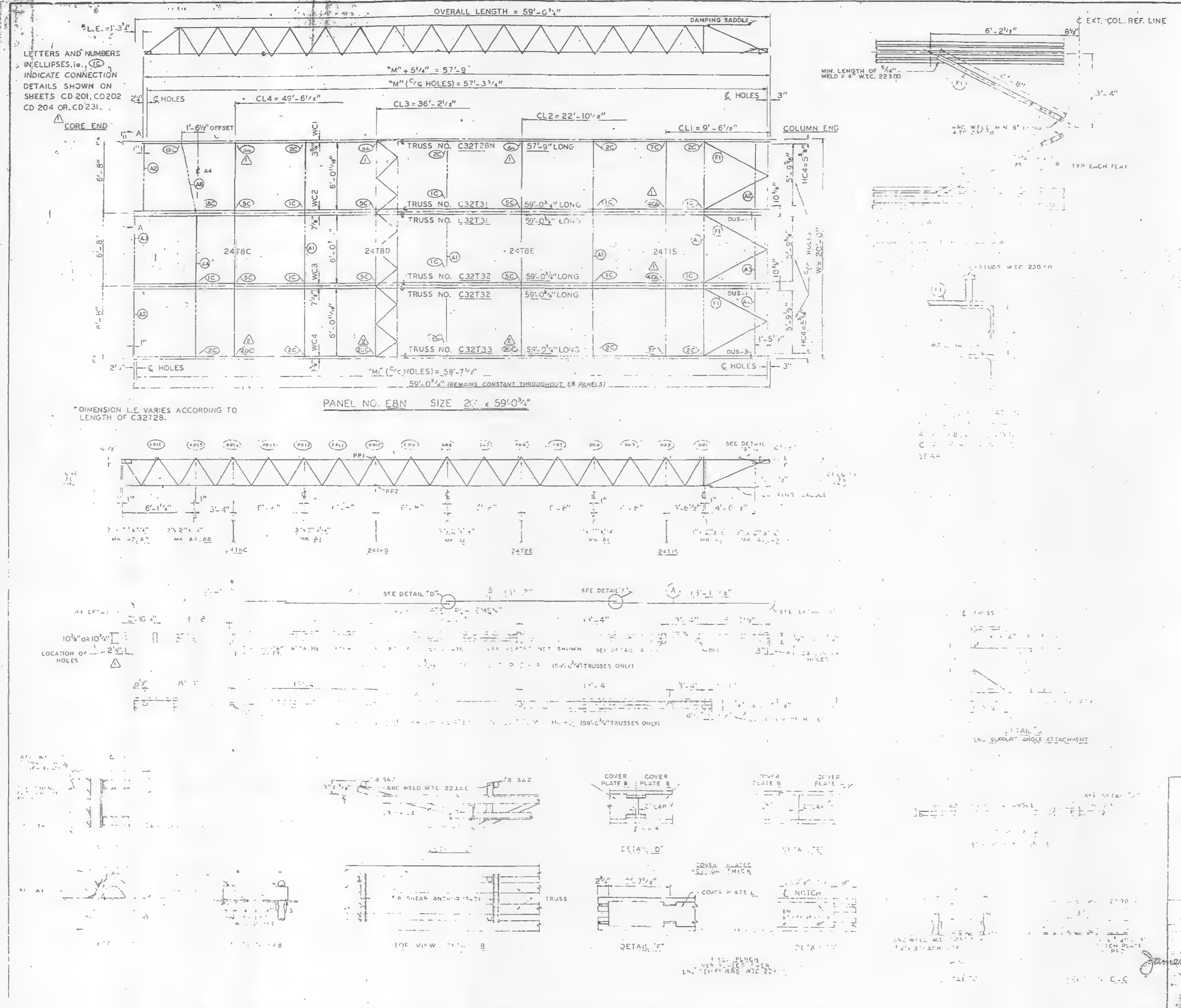
REF. DRWG.

| | |
|---|---|
| 7-AB2-[illegible] | 7-22-68 |
| 7-AB3-74 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 4-6 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44,45 & 46 | 11-25-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 79 & 80 (NORTH)
PANEL ERSH 20' x 59'-0 3/4"
BLDG. B FLOORS 79 & 80 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 7/31/69
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
LACLEDE STEEL CO.
DETAILED BY: A. CARL WEBER
DESIGN DRAWING NO. 7-AB3-74
DRAWN BY gdc DATE JAN. 15, 1969
CHECKED BY T.M. CHURA DATE JAN. 15, 1969
FABRICATION CONT NO W.T.C. 221
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO. FP ERSH



LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204 OR CD 231.

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. E8N SIZE 20' x 59'-0 3/4"

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS | SIZE | DRWG. |
| FLOOR TRUSSES | T28N | 1 | C32T28N - 57'-9" | ST 228N |
| | T31 | 2 | C32T31 - 59'-0 3/4" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0 3/4" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0 3/4" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | ST 208C |
| | T8D | 1 | 24T8D - 19'-11" | ST 208D |
| | T8E | 1 | 24T8E - 19'-11" | ST 208E |
| | T15 | 1 | 24T15 - 19'-11" | ST 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 3/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/8" | ST 403 |
| | A4 | 1 | [illegible] | ST 403 |
| | A8 | 1 | [illegible] | ST 405 |
| DIAGONAL FLATS | F1 | 6 | [illegible] | [illegible] |
| [illegible] PLATES | A | 3 | 9' x .0135" x 13'-11 1/2" | ST 303 |
| | B | 6 | 9' x .0135" x 15'-2" | ST 303 |
| | [illegible] | [illegible] | [illegible] .0135" x 14'-4 1/2" | ST 303 |
| ANGLE CLIPS | C1 | [illegible] | 2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | C2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | [illegible] | 2 | [illegible] | ST 298 |
| | [illegible] | [illegible] | [illegible] | ST 298 |
| CONNECTION BAR | [illegible] | 1 | [illegible] | ST 400 |
| | CB2 | | [illegible] | ST 400 |
| △2 CONNECTION PLATES | P15 | 6 | 6 1/2" x 1/2" x 2'-9" | ST 416 |
| | [illegible] | 5 | [illegible] | ST 400 |
| | [illegible] | [illegible] | [illegible] | ST 400 |
| | [illegible] | 1 | [illegible] | [illegible] |
| | P5 | [illegible] | [illegible] | ST 400 |
| | PF | [illegible] | [illegible] | ST 401 |
| [illegible] | SA2 | [illegible] | [illegible] | [illegible] |
| PATCH PLATES | PP1 | 16 | [illegible] | ST 400 |
| | PP2 | 16 | [illegible] | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| △2 | 8-4-69 | AS NOTED | G.D.C. |
| △1 | 4-24-69 | AS NOTED | G.D.C. |

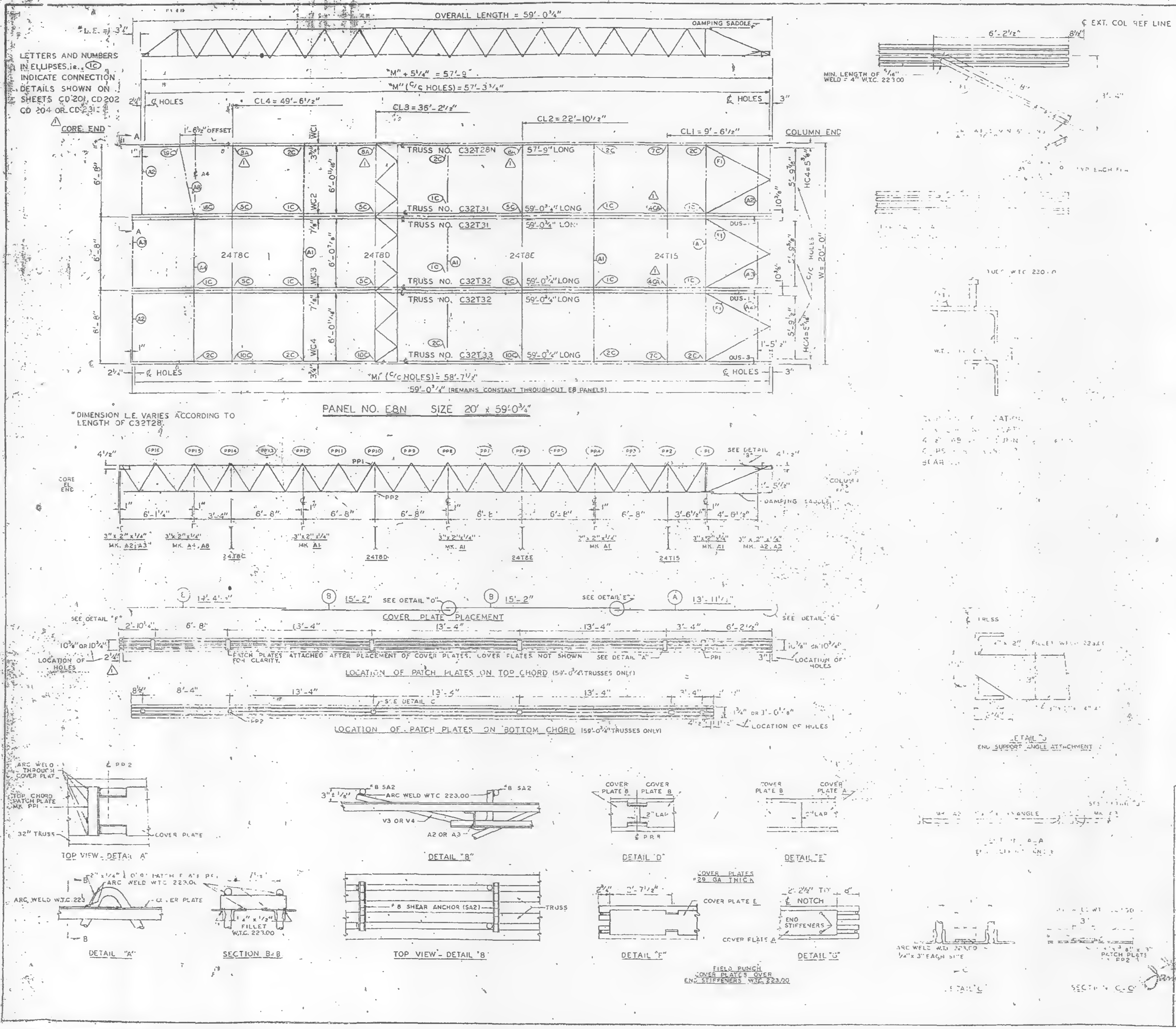
10 7-22-68
60 1-6-69
10-15-68
7-22-68
10-15-68
1-6-69
25 & 28 1-6-69
29 & 30 1-6-69
7-A82-19 1-6-69

44 (SOUTH ONLY)

PANEL E8N 59'-0 3/4"

James W. [illegible] 8/11/69

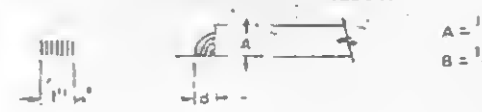
DRAWN BY
DATE APRIL 2, 1969
CHECKED BY
DATE APRIL 2, 1969
IN CHARGE OF PROD. [illegible]
FABRICATION CONTRACT NO.
W.T.C. 221
SHEET NO.
FP E8N


OVERALL LENGTH = 59'-0¾"
DAMPING SADDLE
"L.E." = 3"
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231
"M" + 5¼" = 57'-9"
"M" (C/C HOLES) = 57'-3¼"
℄ HOLES
CL4 = 49'-6½"
CL3 = 35'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
1'-6½" OFFSET
TRUSS NO. C32T28N 57'-9" LONG
TRUSS NO. C32T31 59'-0¾" LONG
TRUSS NO. C32T32 59'-0¾" LONG
TRUSS NO. C32T33 59'-0¾" LONG
24T8C
24T8D
24T8E
24T15
WC1
WC2
WC3
WC4
C/C HOLES W = 20'-0"
"M" (C/C HOLES) = 58'-7½"
59'-0¾" (REMAINS CONSTANT THROUGHOUT E8 PANELS)
PANEL NO. E8N SIZE 20' x 59'-0¾"
"DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
#8 SHEAR ANCHOR (SA2)
ARC WELD WTC 223.00
COVER PLATES #20 GA THICK
END STIFFENERS
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
℄ EXT. COL REF LINE
MIN. LENGTH OF ¼" WELD = 4" WTC 223.00
PATCH PLATE PP2

| REQUIRED MATERIAL PER PANEL | | | | REF. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | DRWG. |
| FLOOR TRUSSES | T28N | 1 | C32T28N - 57'-9" | ST 228N |
| | T31 | 2 | C32T31 - 59'-0¾" | ST 231 |
| | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 19'-11" | BT 208C |
| | T8D | 1 | 24T8D - 19'-11" | BT 208D |
| | T8E | 1 | 24T8E - 19'-11" | BT 208E |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3"x 2"x ¼" ANGLE | A1 | 4 | 3"x 2"x ¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x ¼"x 5'-4 9/16" | ST 403 |
| | A3 | 2 | 3"x 2"x ¼"x 5'-1¾" | ST 403 |
| | A4 | 1 | [illegible] 2"x ¼"x [illegible] 3" | ST 403 |
| | A8 | | 3"x 2"x ¼"x 6'-5¾" | ST 403 |
| DIAGONAL FLATS | F1 | 6 | [illegible] 9" | ST 402 |
| [illegible] PLATES | A | 3 | 9"x 0.135"x 13'-11½" | ST 303 |
| | B | 6 | 9"x 0.135"x 15'-2" | ST 303 |
| | E | 3 | 9"x 0.135"x 14'-4½" | ST 303 |
| ANGLE CLIPS | C1 | 20 | 2"x 1½"x ¼"x 0'-6" | ST 400 |
| | C2 | 4 | 2½"x 1½"x ¼"x 5" | ST 400 |
| DAMPING SADDLE | DUS | 2 | [illegible] | ST 298 |
| | DUS 3 | | [illegible] | ST 298 |
| CONNECTION BAR | CB | 1 | [illegible] | ST 400 |
| | CB2 | [illegible] | [illegible] -3" | ST 400 |
| | CB3 | 5 | ⅝" ϕ x [illegible]-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | [illegible] | ST 400 |
| | [illegible] | 1 | [illegible] | ST 400 |
| | P3 | 1 | [illegible] | ST 400 |
| | P5 | 3 | [illegible] x 1'-6" | ST 400 |
| | P6 | 1 | [illegible] | ST 401 |
| #8 SHEAR ANCHOR | SA2 | [illegible] | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 16 | [illegible] | ST 400 |
| | PP2 | 18 | 3"x ⅜"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

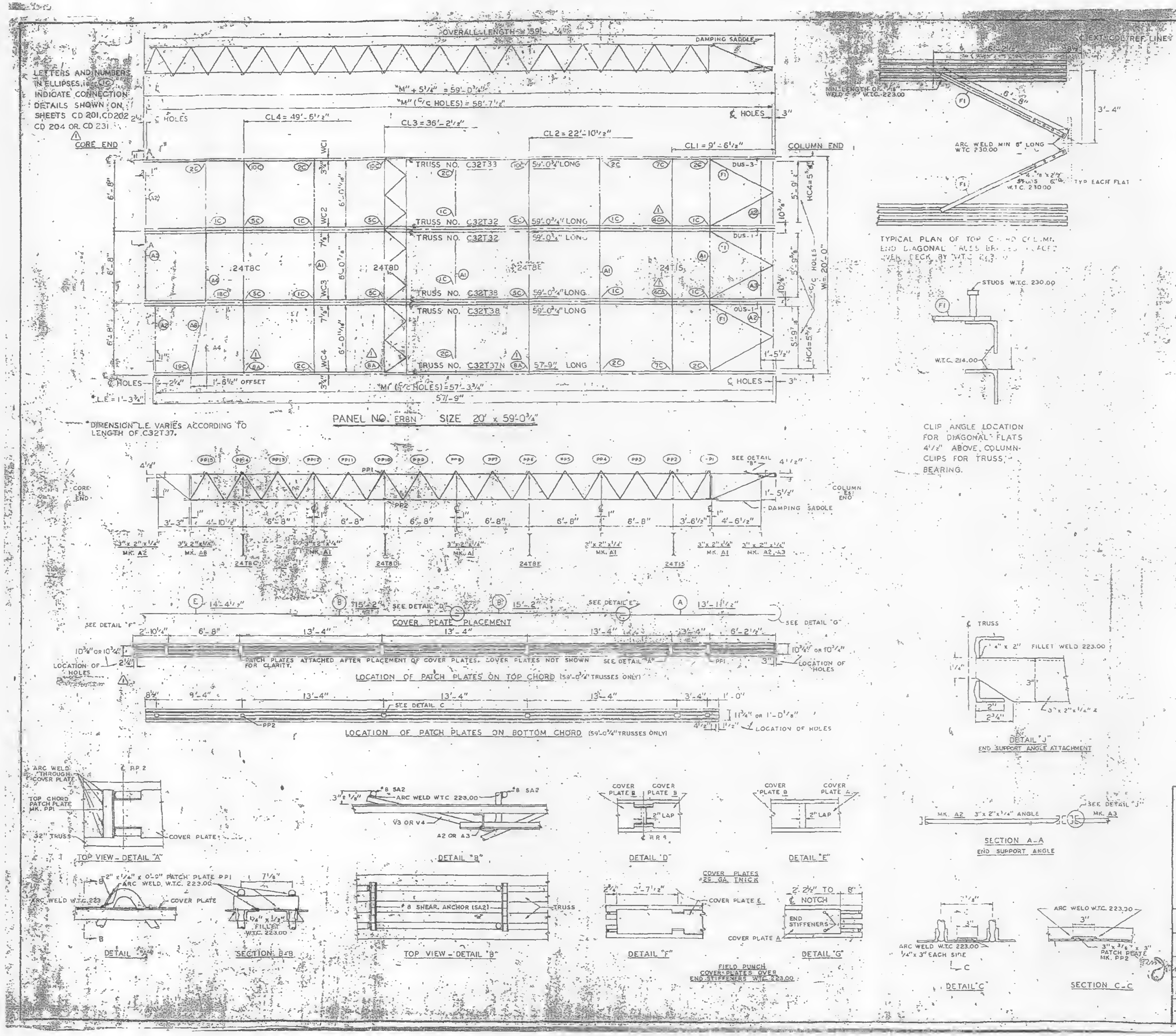


| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 4-24-69 | AS NOTED | G.D.C. |

[illegible] DRWG.
[illegible] 10 — 7-22-68
[illegible] 60 — 1-6-69
[illegible] — 10-15-68
[illegible] 6 — 7-22-68
[illegible] AB4, 47 — 10-15-68
SA 124 — 1-6-69
7-AB1-25 & 28 — 1-6-69
7-AB1-29 & 30 — 1-6-69
7-AB2-19 — 1-6-69

F[illegible] PANEL DETAILS
[illegible] AUTHORITY
BLD[illegible] 44 (SOUTH ONLY)
PANEL E8N 20' x 59'-0¾"

[illegible] COMPANY
FABRICATED AT [illegible]
James W[illegible] 6/12/69
FOR FABRICATION
DETAILED BY [illegible]
DESIGN DRAWING NO. [illegible] AE 60
DRAWN BY gdc
DATE APRIL 2, 1969
CHECKED BY T.M. CHURA
DATE APRIL 2, 1969
FABRICATION CONT. NO. WTC 221
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO. FP E8N



| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | |
| FLOOR TRUSSES | T32 | 2 | C32T32 - 59'-0¾" | ST 232 |
| | T33 | 1 | C32T33 - 59'-0¾" | ST 233 |
| | T37N | 1 | C32T37N 57'-9" | ST 237N |
| | T38 | 2 | C32T38 - 59'-0¾" | ST 238 |
| BRIDGING TRUSSES | T8C | 1 | 24T8C - 9'-11" | BT 208C |
| | T8D | 1 | 24T8D - 9'-11" | BT 208D |
| | T8E | 1 | 24T8E - 8'-[illegible]" | BT 208E |
| | T15 | 1 | 24T15 - 9'-[illegible]" | BT 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x 2" x ¼" x 9'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-11⅝" | ST 403 |
| | [illegible] | 1 | 2" x [illegible] | ST 40[illegible] |
| | A8 | 1 | 3" x 2" x ¼" x [illegible] | ST 405 |
| DIAGONAL FLATS | [illegible] | [illegible] | [illegible] | [illegible] |
| COVER PLATES | A | [illegible] | [illegible] x .0135" x 13'-11½" | ST 303 |
| | B | [illegible] | [illegible] x .0135" x 15'-2" | ST 303 |
| | E | [illegible] | [illegible] x .0135" x [illegible] 4½" | ST 303 |
| ANGLE CLIPS | C1 | [illegible]0 | 2" x 1½" x ¼" x 0'-8" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x [illegible] 3" | ST 400 |
| | CB2 | 6 | 1 3/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅜" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | [illegible] | 5 | 3½" x ⅜" x [illegible] | ST 400 |
| | P2 | 1 | 4½" x .34" x [illegible]-4" | ST 400 |
| | P3 | 1 | 4½" x .39" x [illegible]-0" | ST 400 |
| | P5 | 3 | 4½" x [illegible] x 1'-6" | ST 400 |
| | PC | 1 | 4½" x [illegible] x 0'-[illegible]" | ST 400 |
| #8. SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible]" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x ¾" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 4-24-69 | AS NOTED | G.D.C. |

REF. DRWGS.
7-A82-10 7-22-68
7-A83-61 1-6-69
7-A84-4 10-15-66
7-A84-5 & 16 7-22-68
7-A84-42 10-15-68
SA-124 1-6-69
7-A81-29 & 30 1-6-69
7-A81-33 & 34 1-6-69
7-A82-19 1-6-69

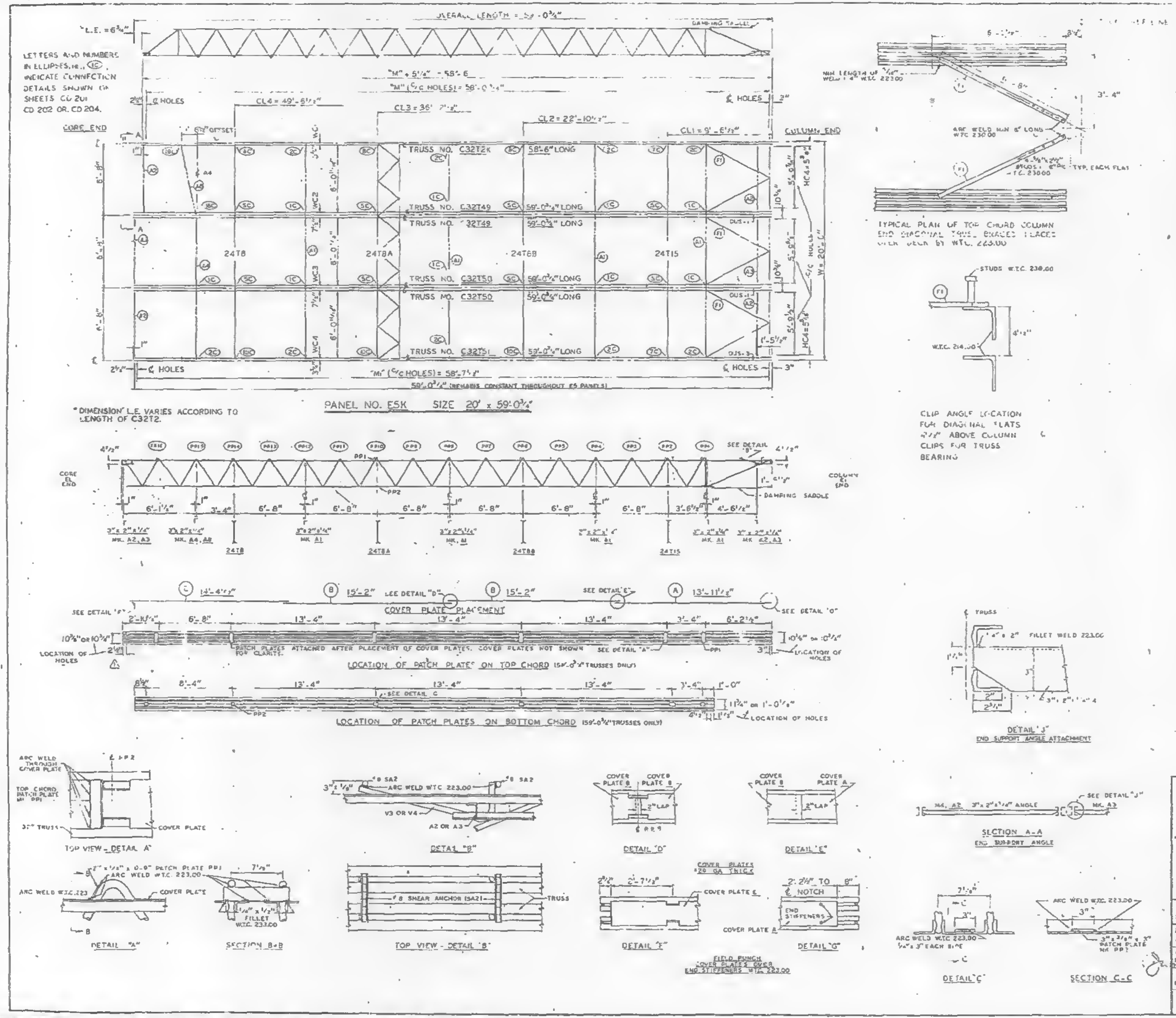
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (SOUTH ONLY)

PANEL ERBN - 20' x 59'-0¾"

FABRICATION BY LACLEDE STEEL COMPANY

| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7 A83 61 | PLATE |
| APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 6/12/69 | DRAWN BY: [illegible] DATE APRIL 2, 1969 | |
| APPROVED FOR FABRICATION BY: [illegible] FOR FABRICATOR DATE | CHECKED BY: T.M. CHURA DATE APRIL 2, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP ERBN |


"L.E. = 6 3/4"
OVERALL LENGTH = 59'-0 3/4"
LETTERS AND NUMBERS IN ELLIPSES, i.e. (C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.
CORE END
COLUMN END
TRUSS NO. C32T2K 58'-6" LONG
TRUSS NO. C32T49 59'-0 3/4" LONG
TRUSS NO. C32T50 59'-0 3/4" LONG
TRUSS NO. C32T51 59'-0 3/4" LONG
24T8
24T8A
24T8B
24T15
"DIMENSION" L.E. VARIES ACCORDING TO LENGTH OF C32T2.
PANEL NO. E5K SIZE 20' x 59'-0 3/4"
DAMPING SADDLE
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)
LOCATION OF HOLES
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL FLATS. BRACES PLACED WITH DECK BY WTC 223.00
STUDS W.T.C. 238.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 2 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
FILLET WELD 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "D"
DETAIL "E"
SECTION A-A
END SUPPORT ANGLE
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 222.00
DETAIL "G"
DETAIL "C"
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS | SIZE | |
| FLOOR TRUSSES | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T49 | 2 | C32T49 - 59'-0 3/4" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0 3/4" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0 3/4" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 10'-11" | ST 218 |
| | T8A | 1 | 24T8A - 10'-11" | ST 218A |
| | T8B | 1 | 24T8B - 10'-11" | ST 218B |
| | T15 | 1 | 24T15 - 10'-11" | ST 215 |
| 3" x 2" x 1/4" ANGLE | A1 | 4 | 3" x 2" x 1/4" x 10'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-[illegible] | ST 403 |
| | A4 | 1 | [illegible] | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-[illegible] | ST 403 |
| [illegible] FLATS | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible]VER PLATES | [illegible] | 3 | 0" x .0135" x 13'-11 1/2" | ST 303 |
| | [illegible] | 6 | 0" x .0135" x 15'-2" | ST 303 |
| | [illegible] | [illegible] | [illegible] x 14'-4" | ST 303 |
| ANGLE CLIP | [illegible] | [illegible] | [illegible] | ST 400 |
| | L2 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3 1/2" x 3 1/2" x [illegible] x 3'-6 3/4" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x [illegible] x 3'-6 3/4" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 8 | 1 1/8" ⌀ x 1'-3" | ST 400 |
| | CB3 | 5 | 1 1/8" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | [illegible] | ST 400 |
| | P2 | 1 | [illegible] | ST 400 |
| | P3 | 1 | [illegible] | ST 400 |
| | P5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | [illegible] | ST 401 |
| 7/8 SHEAR ANCHOR | SA2 | 6 | [illegible] x 0'-[illegible] | ST 414 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 18 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

| NO | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 4-25-69 | AS NOTED | G.D.C. |

REF. DRWGS.

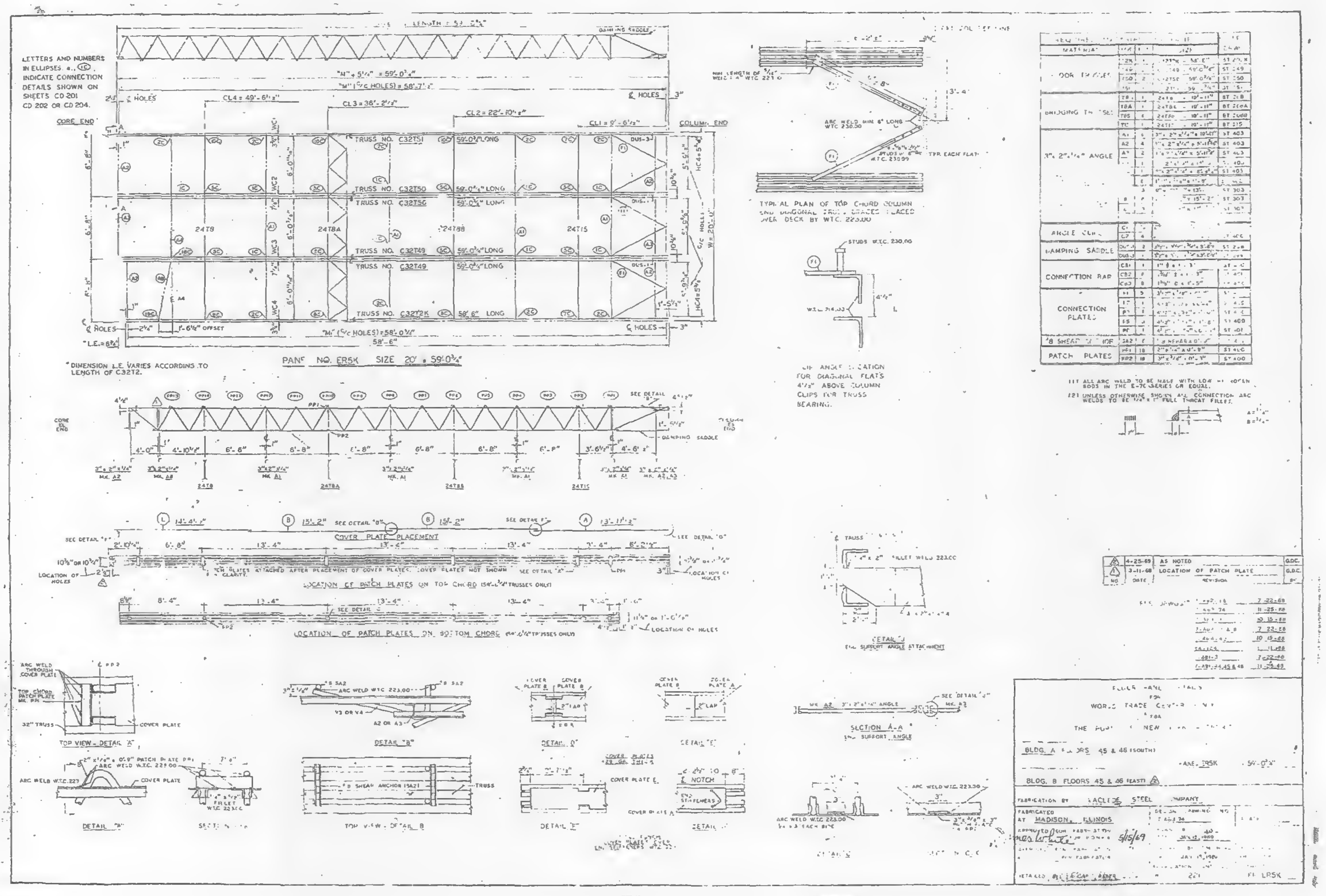
| | |
|---|---|
| 7-A82-3 & 10 | 7-22-68 |
| T-A83-73 | 11-25-68 |
| T-A84-3 | 10-15-68 |
| 7-A84-15 & 18 | 7-22-68 |
| 7-A84-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-A81-3 | 7-22-68 |
| 7-A81-44,45 & 46 | 11-25-68 |

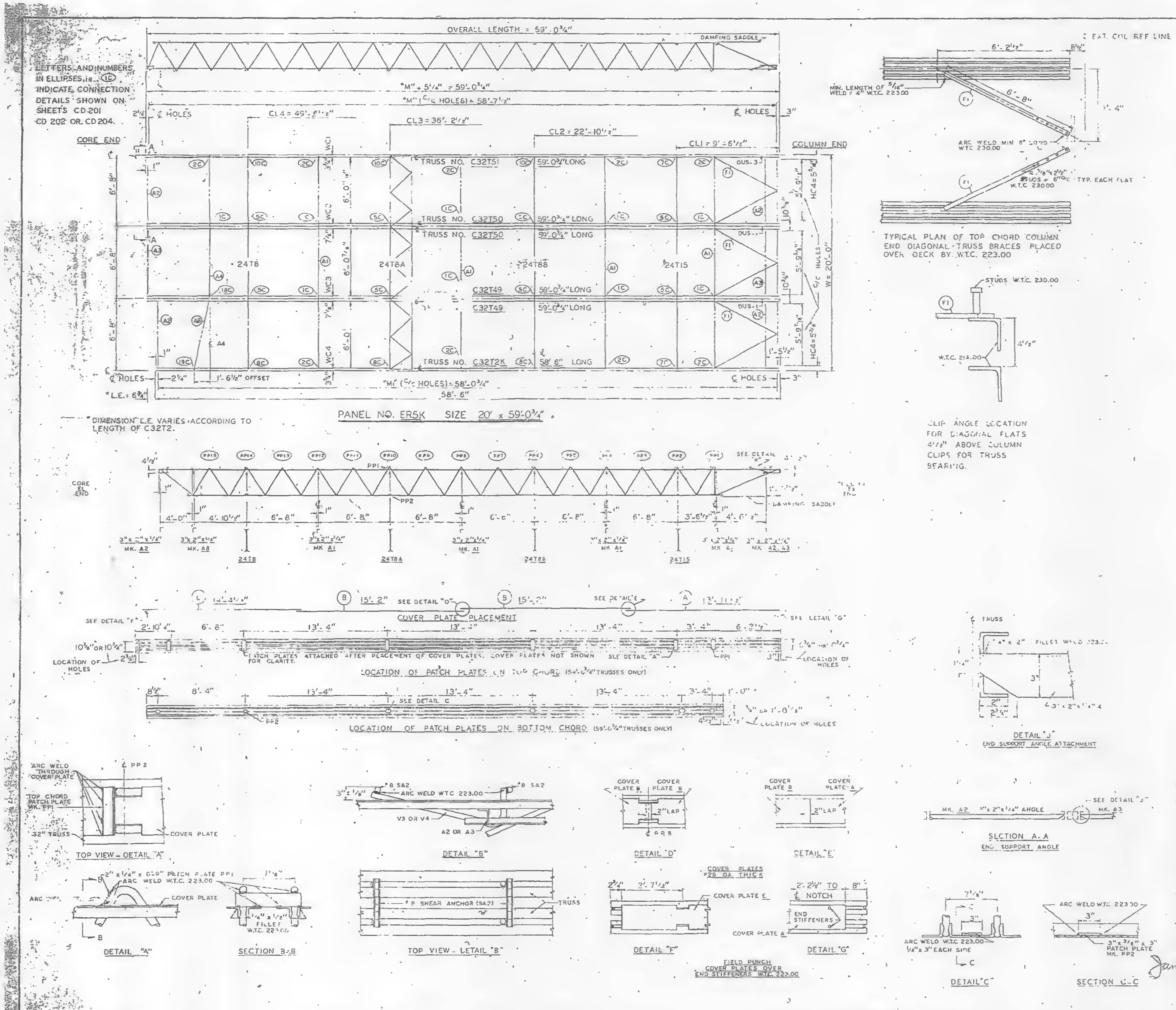
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)
PANEL E5K - 20' x 59'-0 3/4"
BLDG. B FLOORS 45 (EAST & WEST) 46 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

| | | |
|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | DESIGN DRAWING NO. 7-A83-73 | PLATE |
| APPROVED FOR FABRICATION BY James [illegible] FOR PONYA — DATE 5/5/69 | DRAWN BY G.D.C. DATE JAN. 15, 1969 | |
| APPROVED FOR FABRICATION BY ____ FOR FABRICATOR — DATE | CHECKED BY T.M.CHURA DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY LACLEDE STEEL CO. | FABRICATION CONT. NO W.T.C. 221 | SHEET NO FP E5K |

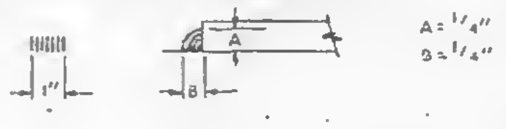

LETTERS AND NUMBERS IN ELLIPSES e.g. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.
"N" + 5¼" = 59'-0¾"
"M" (C/C HOLES) = 58'-7½"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
℄ HOLES
TRUSS NO. C32T51 59'-0¾" LONG
TRUSS NO. C32T50 59'-0¾" LONG
TRUSS NO. C32T49 59'-0¾" LONG
TRUSS NO. C32T2K 58'-6" LONG
24T8
24T8A
24T8B
24T15
DUS-3
W = 20'-0"
1'-6½" OFFSET
"M" (C/C HOLES) = 58'-0¼"
58'-6"
"L.E. = 6¾"
PANEL NO. ER5K SIZE 20' × 59'-0¾"
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
DAMPING SADDLE
SEE DETAIL "B"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
ARC WELD W.T.C. 230.00
STUDS W.T.C. 230.00
ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
MATERIAL
FLOOR TRUSSES
BRIDGING TRUSSES
3" × 2" × ¼" ANGLE
ANGLE CLIPS
DAMPING SADDLE
CONNECTION BAR
CONNECTION PLATES
PATCH PLATES
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" × 1" FULL THROAT FILLET.
DETAIL "J"
SECTION A-A
TOP VIEW - DETAIL "B"
DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "F"
TOP VIEW - DETAIL B
NOTCH
2 4-25-69 AS NOTED G.D.C.
1 3-11-68 LOCATION OF PATCH PLATE G.D.C.
NO DATE REVISION BY
7-22-68
11-25-68
10-15-68
7-22-68
10-15-68
7-22-68
11-25-68
WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 45 & 46 (SOUTH)
BLDG. B FLOORS 45 & 46 (EAST)
ER5K
59'-0¾"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
5/15/69
221
LR5K


LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.
OVERALL LENGTH = 59'-0 3/4"
DAMPING SADDLE
"M" + 5 1/4" = 59'-0 3/4"
"M" (C/C HOLES) = 58'-7 1/2"
CL4 = 49'-8 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T51 59'-0 3/4" LONG
TRUSS NO. C32T50 59'-0 3/4" LONG
TRUSS NO. C32T50 59'-0 3/4" LONG
C32T49 59'-0 3/4" LONG
C32T49 59'-0 3/4" LONG
TRUSS NO. C32T2K 58'-6" LONG
24T8
24T8A
24T8B
24T15
W = 20'-0"
1'-6 1/2" OFFSET
"M" (C/C HOLES) = 58'-0 3/4"
58'-6"
"L.E." = 6 3/4"
PANEL NO. ER5K SIZE 20' x 59'-0 3/4"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
CORE END
SEE DETAIL "A"
DAMPING SADDLE
3" x 2" x 1/4" MK. A2
3" x 2" x 1/4" MK. A8
3" x 2" x 1/4" MK. A1
3" x 2" x 1/4" MK. A1
3" x 2" x 1/4" MK. A1
MK. A2, A3
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF HOLES
LOCATION OF PATCH PLATES IN TOP CHORD (59'-0 3/4" TRUSSES ONLY)
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
MIN. LENGTH OF 3/16" WELD = 4" W.T.C. 223.00
ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS @ 6" O.C. TYP. EACH FLAT W.T.C. 230.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TRUSS
FILLET WELD 223.00
3" x 2" x 1/4" L
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3" x 2" x 1/4" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
2" x 1/4" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
DETAIL "A"
1/4" x 1/2" FILLET W.T.C. 223.00
SECTION B-B
3/8 SA2
ARC WELD WTC 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
3/8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
COVER PLATES #29 GA. THICK
COVER PLATE E
COVER PLATE A
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
2'-2 1/4" TO 8" NOTCH
END STIFFENERS
DETAIL "G"
ARC WELD W.T.C. 223.00
1/4" x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3" x 3/8" x 3" PATCH PLATE MK. PP2
SECTION C-C

| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK | PCS. | SIZE | |
| FLOOR TRUSSES | T2K | 1 | C32T2K - 58'-6" | ST 802K |
| | T49 | 2 | C32T49 - 59'-0 3/4" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0 3/4" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0 3/4" | ST 251 |
| BRIDGING TRUSSES | T8 | 1 | 24T8 - 18'-11" | BT 208 |
| | T8A | 1 | 24T8A - 18'-11" | BT 208A |
| | T8B | 1 | 24T8B - 18'-11" | BT 208B |
| | TC | 1 | 24T15 - 18'-11" | BT 215 |
| 3" x 2" x 1/4" ANGLE | A | 4 | 3" x 2" x 1/4" x 19'-11" | ST 403 |
| | A2 | 4 | 3" x 2" x 1/4" x 5'-11 3/16" | ST 403 |
| | A3 | 2 | 3" x 2" x 1/4" x 5'-11 3/4" | ST 403 |
| | A4 | 1 | 3" x 2" x 1/4" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x 1/4" x 6'-8 5/8" | ST 403 |
| DIAGONAL FLATS | [illegible] | 6 | 1 1/2" x 5/8" x 6'-8" | [illegible] |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-11 1/2" | ST 303 |
| | B | 8 | 9" x .0135" x 15'-2" | ST 303 |
| | E | 3 | 9" x .0135" x 14'-4 1/2" | ST 303 |
| | | | | |
| ANGLE CLIP | C1 | 20 | 2 1/2" x 1 1/2" x 1/4" x 0'-6" | ST 400 |
| | C7 | 4 | 2 1/2" x 1 1/2" x 1/4" x 6" | ST 400 |
| DAMPING SADDLE | DUS-4 | 2 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| | DUS-3 | 1 | 3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/8" ⌀ x 1'-3" | ST 400 |
| | CB3 | 6 | 1 3/8" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | F1 | 5 | 3 1/2" x 3/8" x [illegible] | ST 400 |
| | F2 | 1 | 4 1/2" x .39" x 0'-[illegible]" | ST 400 |
| | P3 | 1 | 4 1/2" x .39" x 1'-0" | ST 400 |
| | F5 | 3 | 4 1/2" x 1/4" x 1'-6" | ST 400 |
| | P6 | 1 | 4 1/2" x .39" x 0'-[illegible]" | ST 401 |
| 3/8 SHEAR ANCHOR | SA2 | 6 | [illegible] REBAR x 0'-4" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x 1/4" x 0'-9" | ST 400 |
| | PP2 | 19 | 3" x 3/8" x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-74 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44, 45 & 46 | 11-25-68 |

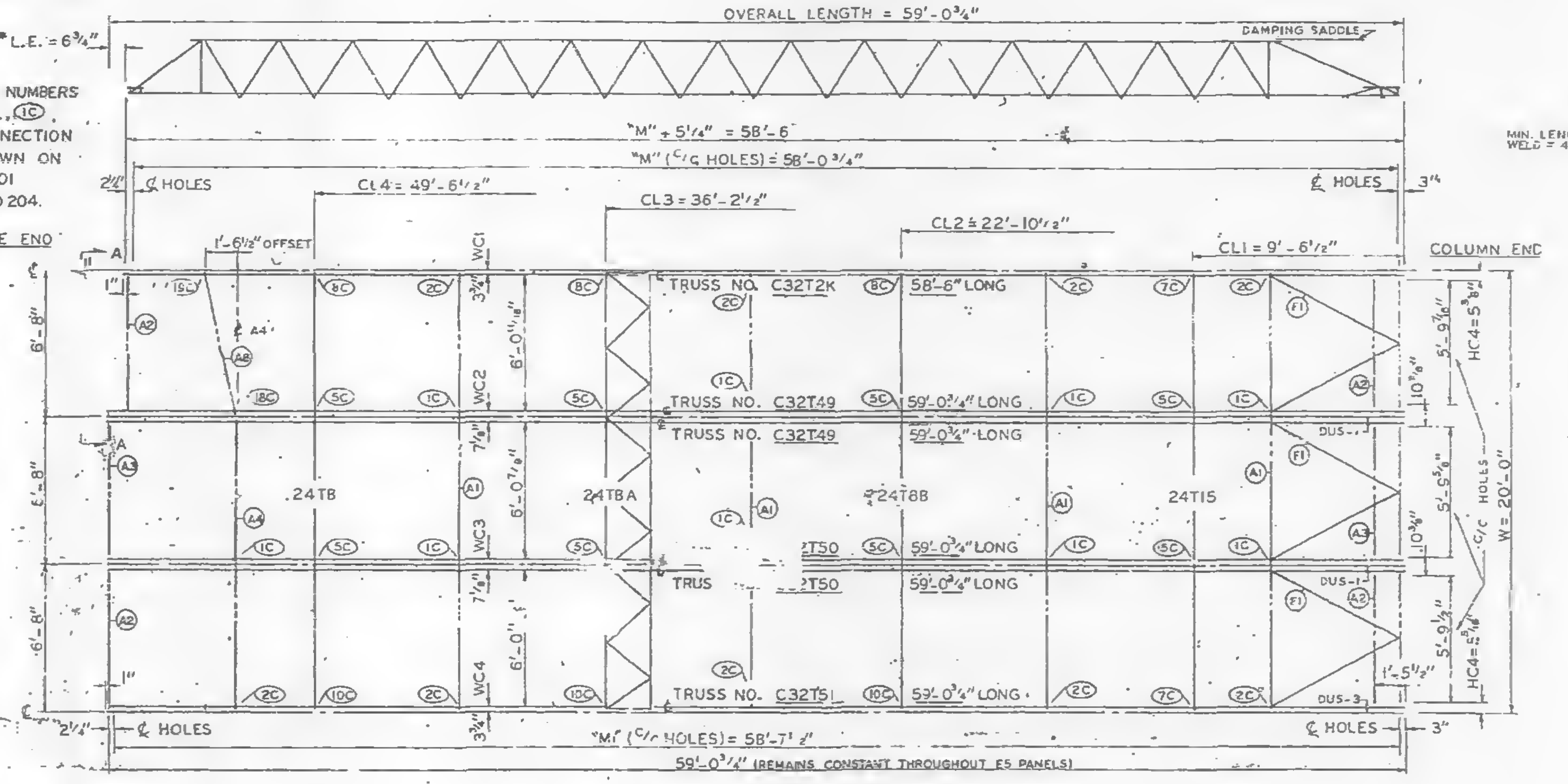
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 & 46 (SOUTH)
PANEL ER5K - 20' x 59'-0 3/4"

FABRICATION BY LACLEDE STEEL COMPANY

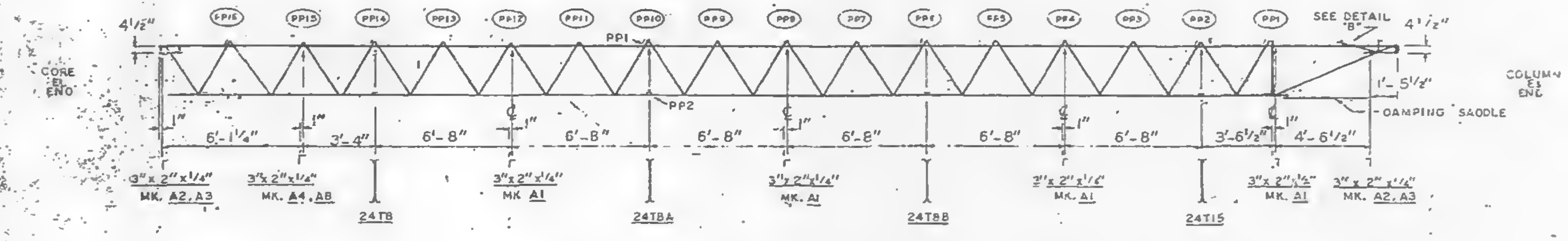
| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO 7-AB3-74 | PLATE |
| APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. | DATE 2/4/69 | DRAWN BY: [illegible]<br>DATE JAN. 15, 1969 | |
| APPROVED FOR FABRICATION BY. FOR FABRICATOR | DATE | CHECKED BY: F.M. CHURA<br>DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| DETAILED BY: A. CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP. ER5K |

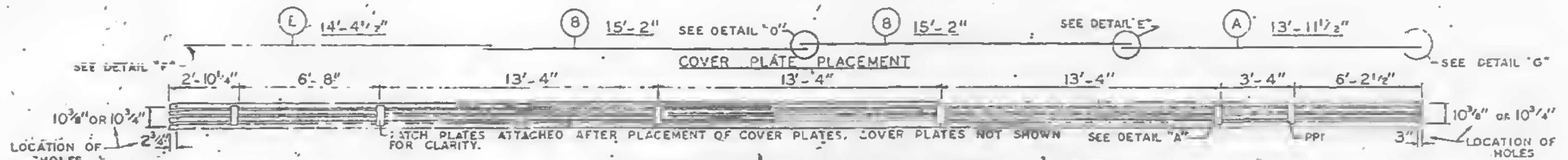
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CO 201 CO 202 OR CO 204.



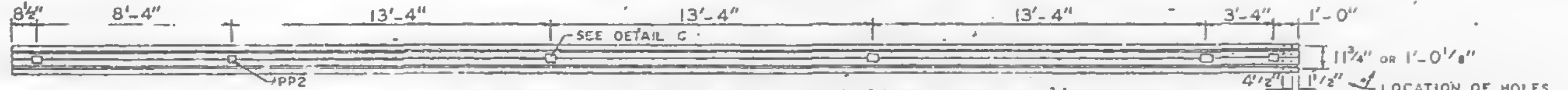
PANEL NO. E5K SIZE 20' x 59'-0¾"

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.

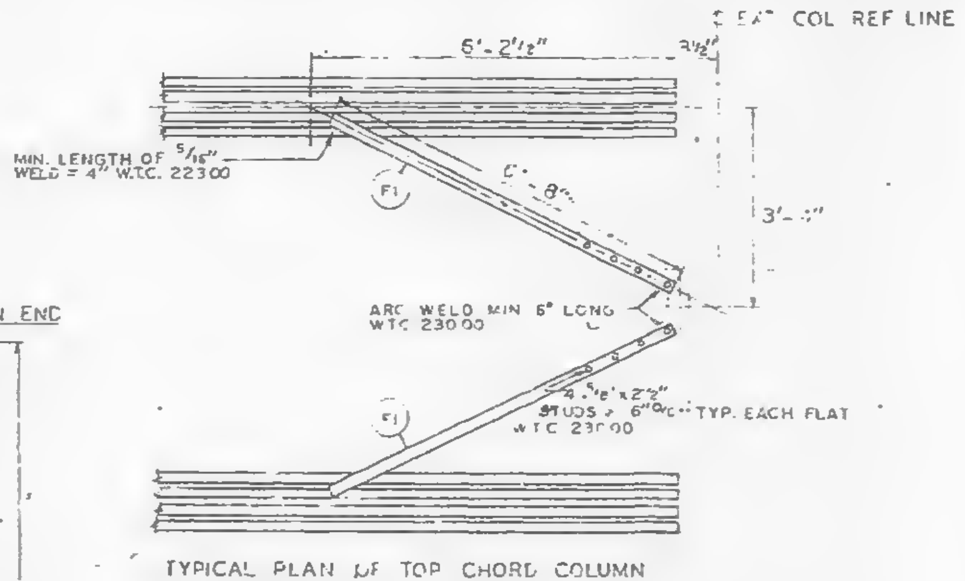




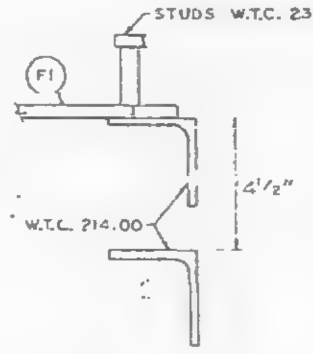
LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)



LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY).


℄ EXT COL REF LINE
6'-2½"
3½"
3'-0"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
F1
6'-8"
ARC WELD MIN 6" LONG W.T.C. 230.00
4 ⅝" x 2½" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

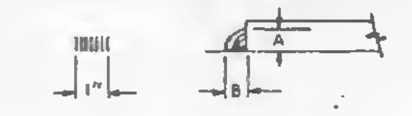


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

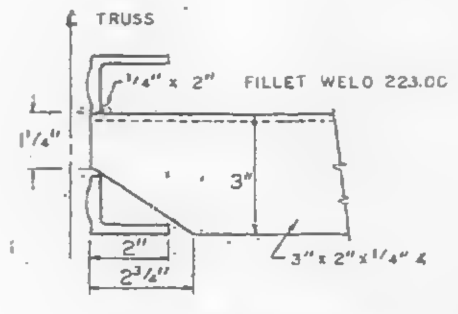
| REQUIRED MATERIAL PER PANEL | | | | REF. DRWG. |
|---|---|---|---|---|
| MATERIAL | MK. | PCS. | SIZE | |
| FLOOR TRUSSES | T2K | 1 | C32T2K - 58'-6" | ST 202K |
| | T49 | 2 | C32T49 - 59'-0¾" | ST 249 |
| | T50 | 2 | C32T50 - 59'-0¾" | ST 250 |
| | T51 | 1 | C32T51 - 59'-0¾" | ST 251 |
| BRIDGING TRUSSES | TB | 1 | 24TB - 19'-11" | BT 208 |
| | TBA | 1 | 24TBA - 19'-11" | BT 208A |
| | TBB | 1 | 24TBB - 19'-11" | BT 208B |
| | T15 | 1 | 24T15 - 19'-11" | BT 215 |
| 3"x 2"x¼" ANGLE | A1 | 4 | 3"x 2"x¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x¼" x 5'-11⅝" | ST 403 |
| | A3 | 2 | 3"x 2"x¼" x 5'-11⅜" | ST 403 |
| | A4 | 1 | 3"x 2"x¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x¼" x 6'-8⅝" | ST 405 |
| DIAGONAL FLATS | I- | 6 | 1½"x ⅝"x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135"x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2"x 1½"x¼"x 0'-8" | ST 400 |
| | C2 | 4 | 2½"x 1½"x¼" x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x⅜"x 3'-6⅞" | ST 298 |
| | DUS-3 | 1 | 3½"x 3½"x⅜"x 3'-6⅞" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1 3/16" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅝" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | F1 | 5 | 3½"x ⅜"x 6½" | ST 400 |
| | F2 | 1 | 4½"x .39"x 0'-8" | ST 400 |
| | F3 | 1 | 4½"x .39"x 1'-0" | ST 400 |
| | F5 | 3 | 4½"x ¼"x 1'-6" | ST 400 |
| | PC | 1 | 4½"x .39"x 0'-8" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-8" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x ¼"x 0'-8" | ST 400 |
| | PP2 | 18 | 3"x ⅜"x 0'-3" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



A = ¼"
B = ¼"

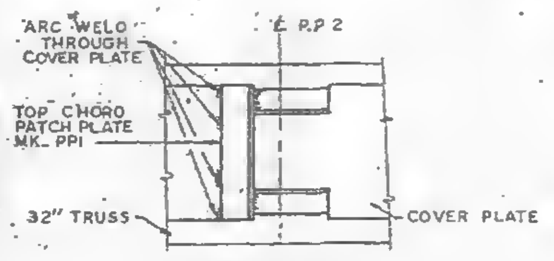


DETAIL "J"
END SUPPORT. ANGLE ATTACHMENT

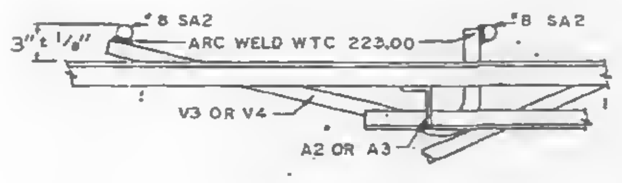
| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

REF. DRWGS.

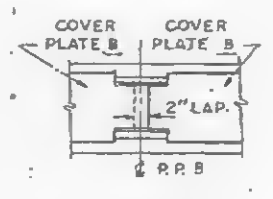
| | |
|---|---|
| 7-AB2-3 & 10 | 7-22-68 |
| 7-AB3-73 | 11-25-68 |
| 7-AB4-3 | 10-15-68 |
| 7-AB4-15 & 16 | 7-22-68 |
| 7-AB4-42 | 10-15-68 |
| SA-124 | 10-11-68 |
| 7-AB1-3 | 7-22-68 |
| 7-AB1-44,45 & 46 | 11-25-68 |



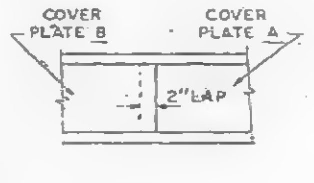
TOP VIEW - DETAIL "A"



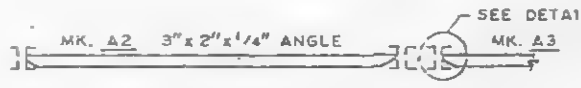
DETAIL "B"



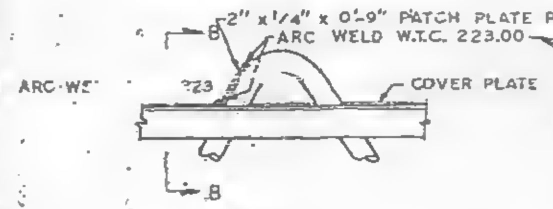
DETAIL "D"



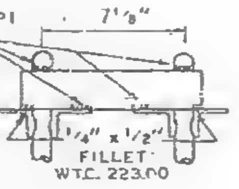
DETAIL "E"



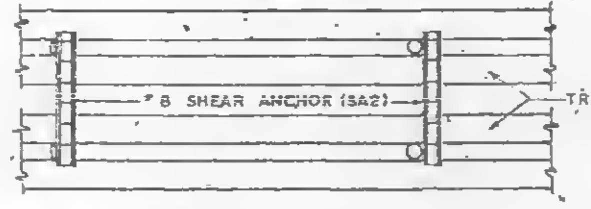
SECTION A-A
END SUPPORT ANGLE



DETAIL "A"

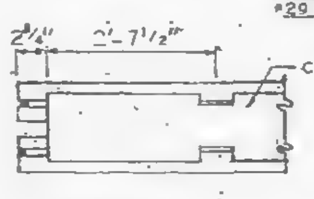


SECTION B-B

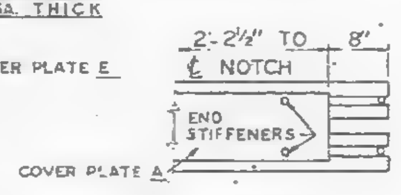


TOP VIEW - DETAIL "B"

COVER PLATES #29 GA. THICK

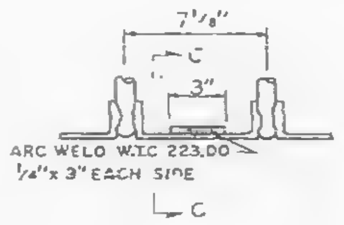


DETAIL "F"

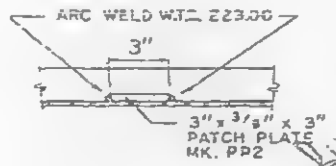


DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C"



SECTION C-C

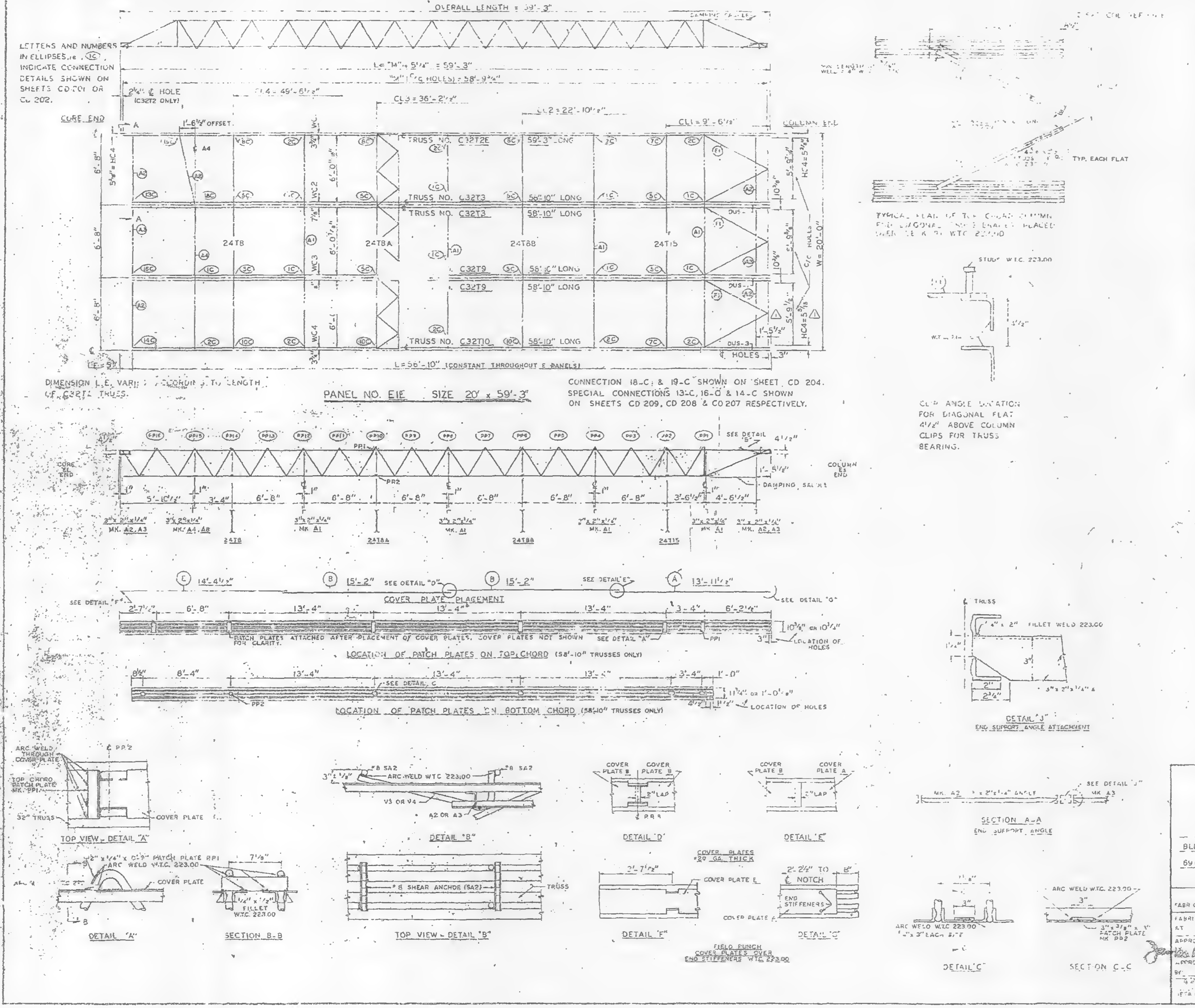
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)

PANEL E5K - 20' x 59'-0¾"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-73 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A BY James White | DATE 2/4/69 | DRAWN BY: adc<br>DATE JAN 15, 1969 | |
| APPROVED FOR FABRICATION FOR FABRICATOR BY: | DATE | CHECKED BY: T.M.CHURA<br>DATE JAN. 15, 1969 | IN CHARGE OF PROD. DEV. |
| LACLEDE STEEL CO.<br>DETAILED BY: A CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP. E5K |



LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

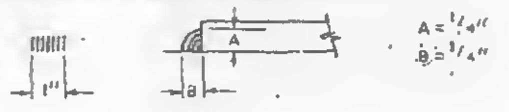
PANEL NO. E1E SIZE 20' x 59'-3"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

| [illegible] | | | | |
|---|---|---|---|---|
| MATERIAL | MK | PCS | [illegible] | [illegible] |
| [illegible] TRUSS | T2E | 1 | [illegible] | [illegible] |
| | T3 | 2 | [illegible] 58'-10" | [illegible] |
| | T9 | 2 | [illegible] | [illegible] |
| | T10 | 1 | C32T10 [illegible] | [illegible] |
| [illegible] TRUSS | TB | 1 | 24TB 19'-11" | [illegible] |
| | TBA | 1 | 24TBA 19'-11" | [illegible] |
| | TBB | 1 | 24TBB 19'-11" | [illegible] |
| | T15 | 1 | 24T15 19'-11" | [illegible] |
| 3"x 2"x ¼" ANGLE | A1 | 4 | 3"x 2"x ¼"x 19'-11" | ST 403 |
| | A2 | 4 | 3"x 2"x ¼"x 5'-1⅝" | ST 403 |
| | [illegible] | 2 | 3"x 2"x ¼"x 5'-[illegible]" | ST 403 |
| | [illegible] | 1 | 3"x 2"x ¼"x 3'-3" | ST 403 |
| | A8 | 1 | 3"x 2"x ¼"x 6'-[illegible]" | ST 403 |
| DIAGONAL FLAT | F1 | 6 | [illegible] | [illegible] |
| COVER PLATES | A | 3 | 9"x .0135"x 13'-11½" | ST 303 |
| | B | 6 | 9"x .0135"x 15'-2" | ST 303 |
| | E | 3 | 9"x .0135"x 14'-4½" | ST 303 |
| | | | | |
| ANGLE CLIPS | C1 | 20 | 2"x 1½"x ¼"x 0'-6" | ST 400 |
| | C2 | 4 | 2½"x 1½"x ¼"x 6" | ST 400 |
| DAMPING SADDLE | DUS-1 | 2 | 3½"x 3½"x ⅜"x 3'-[illegible]" | ST 298 |
| | DUS-3 | 1 | 3½"x 3½"x ⅜"x 2'-6[illegible]" | ST 298 |
| CONNECTION BAR | CB1 | 1 | 1" ϕ x 1'-3" | ST 400 |
| | CB2 | 6 | 1⅛" ϕ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⅜" ϕ x 1'-5" | ST 400 |
| CONNECTION PLATES | F1 | 5 | 3½"x ⅞"x [illegible] | ST 400 |
| | F2 | 1 | 4½"x .34"x 0'-9" | ST 400 |
| | F3 | 1 | 4½"x .34"x 1'-0" | ST 400 |
| | F5 | 3 | 4½"x ¼"x 1'-6" | ST 400 |
| | F6 | 1 | 4½"x .34"x 0'-[illegible]" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 6 | #8 REBAR x 0'-[illegible]" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2"x ¼"x 0'-9" | ST 400 |
| | PP2 | 18 | 3"x ⅜"x 0'-3" | ST 400 |

(1) ALL ARC-WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 9-19-68 | AS NOTED | T.M.C. |

REF. DRWGS.

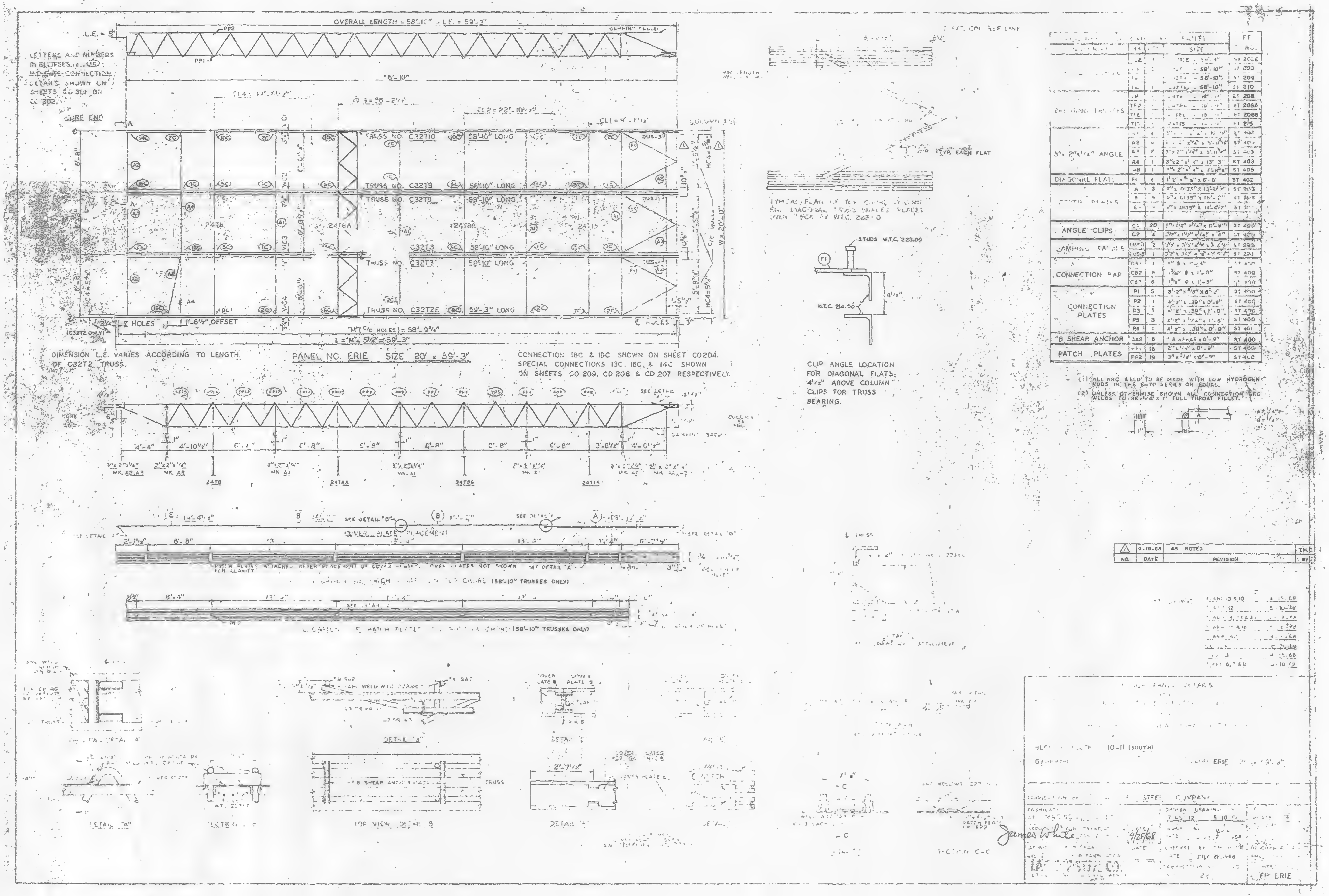
| | |
|---|---|
| 7-AB2-3 & 10 | 4-15-68 |
| 7-AB3-11 | 5-10-68 |
| 7-AB4-3, 3.1 & 39 | 1-3-68 |
| 7-AB4-15 & 18 | 5-6-68 |
| 7-AB4-42 | 4-1-68 |
| SA-124 | 10-20-68 |
| 7-AB1-3 | 4-10-68 |
| 7-AB1-6, 7 & 8 | 5-10-68 |

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
69 (NORTH) PANEL E1E - 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

| | | | |
|---|---|---|---|
| FABRICATED AT MADISON, ILLINOIS | | DESIGN DRAWING NO. 7-AB3-11 5-10-68 | PLATE |
| APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY | DATE 9/25/68 | DRAWN BY gdc DATE JULY 22, 1968 | |
| APPROVED FOR FABRICATION FOR FABRICATOR BY | DATE | CHECKED BY T.M. CHURA DATE JULY 22, 1968 | IN CHARGE OF PROD. DEPT. |
| DETAILED BY CARL WEBER | | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP E1E |


OVERALL LENGTH = 58'-10" L.E. = 59'-3"
L.E. = 5"
PP2
PP1
58'-10"
LETTERS AND NUMBERS IN ELLIPSES, (12C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
CL4 = 49'-11½"
CL3 = 38'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2E 59'-3" LONG
24TB
24TBA
24TB6
24T15
DUS-3
A4
HOLES
1'-6½" OFFSET
"M" (C/C HOLES) = 58'-9¼"
L = "M" + 5½" = 59'-3"
(C32T2 ONLY)
HC4 = 5'-8"
W = 20'-0"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. ERIE SIZE 20' x 59'-3"
CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
STUDS W.T.C. 223.00
F1
W.T.C. 214.00
4½"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS; 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TYP. EACH FLAT
4'-4"
4'-10½"
6'-8"
3'-6½"
4'-6½"
MK. A2, A3
MK. A8
MK. A1
24TB
24TBA
24TB6
24T15
COVER PLATE PLACEMENT
SEE DETAIL "B"
SEE DETAIL "A"
6'-8"
13'-3"
8'-4"
(158'-10" TRUSSES ONLY)
DETAIL "A"
DETAIL "B"
DETAIL "D"
DETAIL "E"
TOP VIEW DETAIL "B"
SECTION C-C
#8 SHEAR ANCHOR
PATCH PLATE

| | MK | NO. | SIZE | REF. DWG. |
|---|---|---|---|---|
| | LE | 1 | [illegible] – 59'-3" | ST 206E |
| | [illegible] | [illegible] | [illegible] – 58'-10" | ST 203 |
| | [illegible] | [illegible] | [illegible] – 58'-10" | ST 209 |
| | [illegible] | 1 | [illegible] – 58'-10" | ST 210 |
| [illegible] TRUSSES | TB | 1 | 24TB – [illegible] | ST 208 |
| | TBA | [illegible] | 24TBA – [illegible] | ST 208A |
| | TB6 | [illegible] | 24TB6 – 19'-[illegible] | ST 208B |
| | T15 | [illegible] | 24T15 – [illegible] | ST 215 |
| 3" x 2" x ¼" ANGLE | A1 | 4 | 3" x [illegible] x 10'-[illegible] | ST 403 |
| | A2 | [illegible] | [illegible] x 5'-[illegible] | ST 403 |
| | A3 | 2 | 3" x 2" x ¼" x 5'-[illegible] | ST 403 |
| | A4 | 1 | 3" x 2" x ¼" x 13'-3" | ST 403 |
| | A8 | 1 | 3" x 2" x ¼" x 6'-8⅝" | ST 405 |
| DIAGONAL FLAT | F1 | [illegible] | 1½" x ⅝" x 6'-8" | ST 402 |
| COVER PLATES | A | 3 | 9" x .0135" x 13'-[illegible] | ST 303 |
| | B | 4 | 9" x .0135" x 15'-2" | ST 303 |
| | E | [illegible] | [illegible] x .0135" x 14'-4½" | ST 3[illegible] |
| ANGLE CLIPS | C1 | 20 | 2½" x 2½" x ¼" x 0'-6" | ST 400 |
| | C2 | 4 | 2½" x 1½" x ¼" x 6" | ST 400 |
| CAMBER SADDLE | DUS-3 | 2 | 3½" x 3½" x ⅜" x 5'-[illegible] | ST 293 |
| | DUS-3 | 1 | 3½" x 3½" x ⅜" x [illegible] | ST 294 |
| CONNECTION BAR | CB1 | 1 | 1" ⌀ x 1'-[illegible] | ST 400 |
| | CB2 | 5 | 1³⁄₁₆" ⌀ x 1'-3" | ST 400 |
| | CB3 | 6 | 1⁵⁄₁₆" ⌀ x 1'-5" | ST 400 |
| CONNECTION PLATES | P1 | 5 | 3½" x ⅜" x 6½" | ST 400 |
| | P2 | 1 | 4½" x .39" x 0'-9" | ST 400 |
| | P3 | 1 | 4½" x .39" x 1'-0" | ST 400 |
| | P5 | 3 | 4½" x ¼" x 1'-6" | ST 400 |
| | P6 | 1 | 4½" x .30" x 0'-9" | ST 401 |
| #8 SHEAR ANCHOR | SA2 | 8 | #8 REBAR x 0'-9" | ST 400 |
| PATCH PLATES | PP1 | 18 | 2" x ¼" x 0'-9" | ST 400 |
| | PP2 | 19 | 3" x ¾" x 0'-9" | ST 400 |

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 9-19-68 | AS NOTED | T.M.C. |

10-11 (SOUTH)
ERIE
STEEL COMPANY
James White 9/25/68
JULY 22, 1968
FP ERIE